

COLUMBIA LIBRARIES OFFSITE
HEALTH SCIENCES RESTRICTED



HR01281909

SERIAL

v. 38

M

1883

July

Columbia University
in the City of New York

Dec.

College of Physicians and Surgeons



Reference Library



Digitized by the Internet Archive
in 2014

THE
NEW YORK
MEDICAL JOURNAL.

A
WEEKLY REVIEW OF MEDICINE.

EDITED BY
FRANK P. FOSTER, M.D.

VOLUME XXXVIII,
JULY TO DECEMBER, 1883, INCLUSIVE.



NEW YORK:
D. APPLETON AND COMPANY,
1, 3, AND 5 BOND STREET.
1883.

LIST OF CONTRIBUTORS TO VOLUME XXXVIII.

(EXCLUSIVE OF ANONYMOUS CORRESPONDENTS).

ABBE, ROBERT, M. D.
 ALLCHIN, W. H., M. B., F. R. C. P.,
 F. R. S. E., London.
 AMEDEN, A. O., M. D., Glens Falls,
 N. Y.
 BACON, GORHAM, M. D.
 BARKER, FORDYCE, M. D., LL. D.
 BARTHOLOW, ROBERTS, M. D., Phila-
 delphia.
 BAYLES, GEORGE, M. D., Orange, N. J.
 BILLINGS, FRANK S., V. S., Boston.
 BIRCHMORE, W. H., M. D., Carbon-
 dale, Kansas.
 BLACKWOOD, W. R. D., M. D., Phila-
 delphia.
 BLAKEMAN, WILLIAM N., M. D.
 BLODGETT, ALBERT N., M. D., Bos-
 ton.
 BRADFIELD, T. NAYLOR, M. D.,
 Newark, N. J.
 BRONSON, EDWARD BENNET, M. D.
 BROWNE, B. BERNARD, M. D., Bal-
 timore.
 BRUSH, E. F., M. D., Mt. Vernon, N. Y.
 BULKLEY, L. DUNCAN, M. D.
 BULL, CHARLES STEDMAN, M. D.
 BULL, WILLIAM T., M. D.
 BURCHARD, T. HERRING, M. D.
 BURRALL, FREDERICK A., M. D.
 CAILLÉ, A., M. D.
 CAMMANN, D. M., M. D.
 CARLETON, CHARLES M., M. D., Nor-
 wich, Conn.
 CARPENTER, WESLEY M., M. D.
 CARROLL, ALFRED L., M. D., New
 Brighton, N. Y.
 CHANDLER, CHARLES F., Ph. D.
 CLARK, ALONZO, M. D., LL. D.
 CLEMENTS, B. A., M. D., U. S. Army.
 COE, H. C., M. D.
 COOPER, HENRY C., M. D.
 CORNING, J. LEONARD, M. D.
 CRAIN, JAMES H., M. D., Junction, Ill.
 CRANDALL, CHARLES R., M. D., Port-
 land, Me.
 CURRIER, ANDREW F., M. D.
 DAY, WALTER DE FOREST, M. D.
 DECKER, A. D., M. D., Pleasant Plains,
 N. Y.
 DELAFIELD, FRANCIS, M. D.
 DEVELIN, E., M. D.
 DUANE, ALEXANDER, M. D.
 DULLES, CHARLES W., M. D., Phila-
 delphia.
 EKLUND, F., M. D., Stockholm.
 FAULKNER, RICHARD B., M. D., Al-
 leghany City, Pa.
 FLINT, AUSTIN, JR., M. D.
 FOSTER, FRANK P., M. D.
 FOSTER, JOEL, M. D.
 FREEMAN, G. L., M. D., Brooklyn.

GERSTER, ARPAD G., M. D.
 GIBNEY, V. P., M. D.
 GIHON, ALBERT L., M. D., U. S. Navy.
 GIRDNER, J. H., M. D.
 GITHIENS, W. H. H., M. D., Philadel-
 phia.
 GOODELL, WILLIAM, M. D., Philadel-
 phia.
 GOODRIDGE, E. A., M. D.
 GRANGER, REED B., M. D.
 GRISWOLD, GASPARD, M. D.
 HALE, WILLIAM H., Esq., Albany.
 HALL, LUCY M., M. D., Sherborn, Mass.
 HALSTED, WILLIAM S., M. D.
 HAMILTON, ALLAN McLANE, M. D.
 HAMILTON, JOHN B., M. D., U. S.
 Marine-Hospital Service.
 HAMMOND, GRAEME M., M. D.
 HAMMOND, WILLIAM A., M. D.
 HARRISON, GEORGE T., M. D.
 HARWOOD, E. C., M. D.
 HEINEMAN, H. N., M. D.,
 HENRY, M. H., M. D.
 HOLT, L. EMMETT, M. D.
 HOW, LUCIUS W., M. D., Starkey, N. Y.
 HUGHES, C. H., M. D., St. Louis.
 HUNTER, JAMES B., M. D.
 HURD, E. P., M. D., Newburyport, Mass.
 JACKSON, GEORGE THOMAS, M. D.
 JERSEY, CHARLES A., M. D.
 KELSEY, CHARLES B., M. D.
 KERR, J. G., M. D., Canton, China.
 KIDDER, J. H., M. D., U. S. Navy.
 KIMBALL, RICHARD B., Esq.
 LEAMING, JAMES R., M. D.
 LUSK, WILLIAM T., M. D.
 McCORMACK, J. N., M. D., Bowling
 Green, Ky.
 McKEE, J. C., M. D., U. S. Army.
 MAAS, FREDERICK M., Esq.
 MACCORMAC, SIR WILLIAM, London.
 MANN, MATTHEW D., M. D., Buffalo.
 MARCY, HENRY O., M. D., Boston.
 MEARS, J. EWING, M. D., Philadelphia.
 MERCER, ALFRED, M. D., Syracuse.
 MILLER, ADOLPH W., M. D., Ph. D.,
 Philadelphia.
 MILLICAN, KENNETH W., M. D., Kins-
 ton, England.
 MITCHELL, C. PITFIELD, M. D., M.
 R. C. S.
 MITCHELL, R. W., M. D., Memphis,
 Tenn.
 MONTI, ALOIS, M. D., Vienna.
 MORRISON, WILLIAM H., M. D., Phil-
 adelphia.
 MUNDÉ, PAUL F., M. D.
 NANCREDE, CHARLES B., M. D.,
 Philadelphia.
 NICOLL, HENRY D., M. D.
 OPPENHEIMER, W. T., M. D.

OTT, ISAAC, M. D., Easton, Pa.
 PARTRIDGE, EDWARD L., M. D.
 PEPPER, WILLIAM, M. D., LL. D.,
 Philadelphia.
 PETERS, JOHN C., M. D.,
 PETERSON, FREDERICK, M. D., Buf-
 falo.
 PIFFARD, HENRY G., M. D.
 PLANT, WILLIAM T., M. D., Syracuse.
 POLK, WILLIAM M., M. D.
 POMEROY, OREN D., M. D.
 POOLEY, J. H., M. D., Toledo, O.
 POORE, CHARLES T., M. D.
 PORTER, P. BRYNBERG, M. D.
 POST, ALFRED C., M. D., LL. D.
 POTTER, W. W., M. D., Buffalo.
 RANNEY, AMBROSE L., M. D.
 RAPHAEL, H., M. D.
 RAUCH, JOHN H., M. D., Chicago.
 REED, C. A. LEE, M. D., Cincinnati.
 REEVES, JAMES E., M. D., Wheeling,
 W. Va.
 REMSEN, CHARLES, M. D.
 RILEY, HENRY A., Esq.
 ROBINSON, BEVERLEY, M. D.
 ROHÉ, GEORGE H., M. D., Baltimore.
 SCHUYLER, WILLIAM D., M. D.
 SEELYE, HIRAM H., M. D.
 SEXTON, SAMUEL, M. D.
 SHATTUCK, GEORGE B., M. D., Bos-
 ton.
 SHULTZ, R. C., M. D.
 SKENE, A. J. C., M. D., Brooklyn.
 SMITH, ANDREW H., M. D.
 SMITH, ANSON P., M. D., Sandy Hook,
 Conn.
 SMITH, Q. CINCINNATUS, M. D., Aus-
 tin, Texas.
 SMITH, R. H., Esq., Newtown, Conn.
 STILLMAN, CHARLES F., M. D.
 SUMNER, TRUMAN S., M. D., Brook-
 lyn.
 SUTTON, R. STANSBURY, M. D., Pitts-
 burgh, Pa.
 TANSLEY, J. OSCROFT, M. D.
 THOMAS, T. GAILLARD, M. D.
 ULTZMANN, ROBERT, M. D., Vienna.
 WALLIAN, SAMUEL S., M. D., Bloom-
 ingdale, N. Y.
 WARREN, STANLEY P., M. D., Port-
 land, Me.
 WASHBURN, CHARLES E., M. D.
 WEIR, ROBERT F., M. D.
 WELLS, FRANK, M. D., Boston.
 WENDT, EDMUND C., M. D.
 WHITE, JOHN C., L. R. C. P. E.
 WILE, WILLIAM C., M. D., Sandy Hook,
 Conn.
 WOOD, HORATIO C., M. D., Philadel-
 phia.
 WYETH, JOHN A., M. D.

Lectures and Addresses.

LECTURES ON

DISEASES OF THE KIDNEYS.

DELIVERED AT THE COLLEGE OF PHYSICIANS AND SURGEONS.

By FRANCIS DELAFIELD, M. D.,

PROFESSOR OF PATHOLOGY AND PRACTICAL MEDICINE.

LECTURE I.

CHRONIC CONGESTION OF THE KIDNEYS.

GENTLEMEN: The first of the diseases of the kidneys that we will consider is the so-called "chronic congestion of the kidneys." This lesion of the kidneys is not peculiar to the kidneys, but is similar to what is found in certain of the other viscera as a result of chronic venous congestion. When any one of the viscera becomes the seat of a chronic venous congestion from some mechanical cause, as from an organic disease of the heart, the result is, in the first place, to produce a constant oversupply of venous blood to the part, and, in the second place, to produce at the same time too small a supply of arterial blood. When a viscus, therefore, is in a condition of chronic congestion, it is always supplied with too little arterial blood, but, on the other hand, with too much venous blood. In this condition a viscus may remain almost any length of time without any further structural changes taking place, and there is a great difference in individual cases as to how much functional disturbance may result from this chronic congestion. In some cases the viscus may be congested thus for a long time without producing any interference with its functions, while in others, after a short time, sufficient changes will take place to induce functional disturbances.

When this venous congestion of a viscus has lasted a sufficient length of time, then we have other changes taking place which were not at first developed. In the first place, there is a development of a chronic inflammation, which varies in character with the viscus in which it is developed, and with this inflammation there will soon be changes also in the capillary vessels and arteries. The lumen of the capillaries will then be found to be dilated, and the capillaries themselves increased in length and their walls thickened. There will also be continual thickening of the walls of the arteries, while their lumen will not be changed, but will remain of the same size.

In the case of the kidneys we have at first a chronic congestion alone, and then, after some length of time, inflammatory changes may be added which may be referred to the epithelium of the tubules, and especially of those tubules found in the cortical portion of the kidney. In other cases the chronic inflammation may be more decided, and then not only will there be changes in the epithelium lining the tubules, but there will also be a production of new connective tissue and changes in the Malpighian bodies, and, it may be, in the arteries of the viscus also.

While the kidney remains in this condition of chronic congestion it is increased in size and firmness, its capsule is non-adherent, its surface is smooth after stripping the

capsule off, and, if we cut the kidney open, we will find that it is uniformly congested, and it has a purplish or deep red color, from the large amount of blood contained in the veins; and this congestion is more marked in the pyramidal than in the cortical portion, and the consistence of the whole kidney is very much harder than it should be.

When there is added to this chronic congestion an inflammatory swelling of the epithelium of the tubules, then the kidney will be enlarged, and especially the cortical portion, and stripping off the capsule will leave the surface smooth and hard, but the epithelium of the convoluted tubes will be swollen and granular, and broken down in different ways.

When, again, the inflammatory process is not confined to the epithelial lining of the tubes, but has extended to the stroma of the kidney, we find a different appearance in the kidney. The organ is in some of these cases larger than normal, but in others it is diminished in size, though it still maintains its stony hardness. The capsule does not come off so easily as before, leaving a smooth surface behind, but it is now adherent, and, when stripped off, it carries some of the cortical substance with it, and so leaves the surface irregular and nodular. On cutting into the kidney, the cortical portion will be found to be of natural thickness, or else somewhat diminished. If you examine it minutely, you will find changes have taken place in the tubules of the cortical portion, and there are also patches of new connective tissue scattered about, and changes in the Malpighian bodies.

In other cases the gross appearance of the organ is different. The kidney is increased in size, the capsule is non-adherent, the surface is smooth after stripping off the capsule, and, on cutting into it, instead of presenting the appearance of other varieties of congested kidneys, it does not look like these at all, but the cortical portion is white, and not red and congested, while the pyramids are more red, and the whole organ resembles very closely the large white kidney of chronic diffuse nephritis. I have been used to calling this the large white kidney of chronic cardiac disease, for I believe its cause to be in all cases an organic disease of the heart. In these kidneys there will be found well-marked changes in the epithelium of the tubules and in the stroma, and a very decided thickening of the arteries, especially those in the cortical portion. The most common cause of such changes in the kidney is, as I have said, organic disease of the heart. Any well-marked valvular lesion of the heart interfering with the circulation is capable of inducing this condition. A simple dilatation of the heart without any valvular lesion may also induce it, or an aneurysm of the aorta, or a chronic pericarditis, with a large effusion of fluid into the pericardial sac, or an emphysema of the lung, or any tumor pressing upon the larger veins. Some of the cases of the so-called albuminuria of pregnancy are examples of the chronic congestion due to disturbance of the circulation, because of the pressure of the pregnant uterus upon the veins. But of all these causes heart disease is very much the most common, and after that comes emphysema of the lungs, and then pregnancy.

We find often enough, by comparing the histories of different patients and by the examination of kidneys after death, that a very marked degree of congestion may exist for a long time without producing any change in the urine and without the patients presenting any symptoms whatever. We have examples of this in some cases of sudden occurrence of a hydro-pneumothorax. A patient may get a hydro-pneumothorax from a sudden perforation of the lung and live on for two weeks or so after, and then die; and in some of these cases we find in the kidneys a very marked chronic congestion indeed, which has evidently been developed only since the hydro-pneumothorax set in, and yet there have been no changes observed in the urine, and no symptoms of the kidney disorder have been manifested. So, too, in the case of patients with organic disease of the heart who are carried off by some sudden accident, such as by asphyxia or some traumatic cause, we find this condition of congestion in the kidneys after death when there have been no changes during life referable to the urine and no symptoms of kidney disease. So we must admit the existence of a form of chronic congestion of the kidney with no functional disturbances to show it during life. In other cases there will be symptoms of organic disease of the heart or of emphysema of the lungs or other disorders for some length of time, and then at length changes will appear in the urine. As a result of pregnancy, these changes do not appear usually until the later months, i. e., until after the seventh month, and more frequently not until the eighth, ninth, or tenth month will you observe changes in the urine and other symptoms of this disease.

The changes found in the urine in all cases are these: In the first place, the urine should contain some albumin, and, together with the albumin, casts. If the condition is one of simple chronic congestion alone, without any structural changes in the kidneys, then the amount of albumin in the urine is very small, but yet large enough to be detected by the ordinary tests, and in these cases the number of casts in the urine is also very small, and ordinarily there are present only small hyaline casts. When to the chronic congestion are added structural changes in the kidneys, then the amount of albumin in the urine is increased and the casts are more constant in appearance and in larger numbers, and they are not of the hyaline variety only, but also granular, and nucleated casts are found.

As to the quantity of urine excreted, there is a great variation in different cases. In some it is diminished quite early in the attack, while there are yet no symptoms; but, instead of passing forty or fifty ounces a day, they only pass twenty or twenty-five ounces. Others will pass the full amount of urine, or some even more—i. e., from fifty to seventy ounces in the twenty-four hours. But in nearly all cases, when they get to near the close of the disease and the other symptoms become more marked, then the urine is usually diminished, and it may be very much diminished, so that only ten or twelve ounces will be passed in the twenty-four hours, or in thirty-six or forty-eight hours, and at last there may not be any urine at all. So, though the quantity of urine in different cases varies very much during the course of the disease, yet there are but few that get on

toward the close without there being a diminution in the amount passed.

The specific gravity of the urine is not much changed if the condition is only that of a chronic congestion of the kidneys. But when to this are added structural changes in the organ, then the specific gravity may become very small, as in the case of a chronic diffuse nephritis.

Besides these changes in the urine, we find, in almost all cases, symptoms referable to the lungs. A cough is apt to be developed which is dependent not on the kidney lesion, but on the old cardiac disease which existed first, or on an old emphysema of the lungs; and it is accompanied, as a rule, with a more or less profuse expectoration of mucus, pus, or blood. There is also present in nearly all cases a marked degree of dyspnoea, and it is apt to be very severe, and to prevent the patient from lying down or from sleeping well at night. It depends partly on the heart condition and partly on the condition of the lungs if there is an emphysema, or upon the presence of fluid in the pleural cavity, if any such exists; but in most cases it is none of these, but rather that peculiar nervous dyspnoea that belongs to a variety of the disorders of the kidneys, and is very distressing and uncomfortable to meet with.

Symptoms referable to the stomach also occur. After a time the appetite is lost, and there is likely to be more or less nausea and vomiting. Cerebral symptoms are sometimes developed. There is often a very distressing and continuous headache, very decided restlessness, a good deal of anxiety, and an inability to sleep, and this last symptom is aggravated so much by the dyspnoea that the patient can not lie down, but if he sleeps at all it must be while sitting up in a chair. At a later period, delirium and convulsions may come on, and these may alternate or be succeeded by coma.

The nutrition of the patient is affected at first only slowly, but after a time more rapidly, and then there is loss of flesh and of strength, with a steadily increasing anæmia. So the patient goes on growing gradually worse and worse, and these symptoms becoming constantly more and more evident.

When the chronic congestion of the kidneys succeeds an ordinary condition of organic heart disease, or an emphysema of the lungs, then there will be at first only the symptoms belonging to this condition of the heart or lungs, and these will exist for a considerable length of time without attracting any unusual attention. But, after the lapse of some time, it will be found that the patient is getting worse, and the disturbance of the heart's action is becoming more and more decided, or the emphysematous symptoms are becoming more marked than before. Then the cough and the dyspnoea become worse and worse, and a change takes place in the patient's whole condition; his nutrition suffers, and he loses strength rapidly; the anæmia becomes more and more decided, and disturbances of the stomach, with uncontrollable vomiting, are apt to make themselves evident; then the patient develops cerebral symptoms and dropsy, and finally dies either in a condition of extreme exhaustion, or with very marked dropsy, or from an attack of dyspnoea that can not be removed, or

in an attack of convulsions, or else in a comatose condition, or it may be suddenly and unexpectedly. Different patients vary widely as to the rapidity with which they get worse. Some get worse constantly during a period of several weeks, while others develop dangerous symptoms within a few days. They also differ much as to their ability to emerge from a critical condition when they have once passed into it. A considerable number will not get better at all, but grow constantly worse and worse until they die. But, on the other hand, not infrequently this is not the case; but the patient, after remaining in this condition for a few days or a few weeks, will then get gradually better, and return to a condition of comparative health and comfort. This may continue for some months, and then the patient is apt to have another similar attack. This may be recovered from for a time, and then another may occur, and so on until there have been a number of such attacks; finally in one of these the patient will die. So, no matter how sick a patient seems, even though he has a number of successive convulsions and is apparently moribund, you can never be sure but that he will yet get better, and return to a condition of comparative comfort for a time.

In that form of chronic congestion which is due to the presence of a pregnant uterus in the abdominal cavity, the woman is usually well enough until the later months of pregnancy—i.e., until the eighth, ninth, or tenth lunar month. Then, if the urine is examined from day to day, as it ought to be in all cases of pregnancy, it will be found usually that there are albumin and casts in the urine before the development of any of the other symptoms of a kidney lesion. This is not always the case, but in the larger number the appearance of albumin and casts, with a diminution in the production of urine, will be the first evidence of kidney disturbance in pregnancy. The other symptoms, when they do appear, are, in the first place, sometimes simply a change in the appearance of the woman. Her face usually becomes paler than is natural, and it may be of an unnaturally livid color, or deeply congested, and sometimes pallor alternates with a congestion of the skin. Then, in other women, the first symptom is the sudden development of a persistent and distressing headache, or, it may be, obstinate vomiting sets in, or œdema of the legs and a general dropsy. In others the first symptom may be an attack of convulsions, succeeded by or alternating with a state of partial or complete unconsciousness. Whichever of these symptoms comes first, the symptom most apt to be developed and most to be dreaded is convulsions, coming on one after another and succeeded by coma, or successive convulsions, with a condition of unconsciousness between.

Some of these patients will die from this condition of the kidneys, and when they do they are especially apt to die in a convulsion, or else they do not emerge from the coma succeeding a convulsion. But in a very large number of cases the result is much better than this, especially if labor can be induced and delivery accomplished. Then, although the woman is still sometimes left in a dangerous condition for several days, yet after that the symptoms subside, and she gets better rapidly, and for years after there will be no change in the urine, and no further evidences of renal disease.

In the treatment of all cases of this disease the great object is directed toward regulating the condition of the circulation, for it is upon this that the venous congestion depends. The degree of success you will have in relieving this venous congestion will depend upon the cause that produces it. The greater the mechanical interference with the circulation, the more difficulty you will have. When there is too much blood in the veins and too little in the arteries, there are several different ways of trying to restore the natural proportions. The simplest way is merely to abstract a certain amount of blood from the venous circulation—that is, to bleed from one of the larger veins. In this way you may relieve the venous congestion to a greater or less degree, and then, as a result of this, there will generally be a better action of the heart, which will cause a filling up of the arteries. This method is especially serviceable in those cases where the chronic congestion occurs in connection with the state of pregnancy. In these cases, bleeding from the arm is often found to be productive of good results, and often the expulsion of the child, with the consequent loss of blood from the veins of the uterus, acts in the same way by diminishing the amount of blood in the systemic veins, and this alone will generally be sufficient to answer the purposes of bleeding. But, if for any reason you can not immediately induce labor and extract the child, then it is proper to take blood from the arm in considerable amount. Another means we can employ to diminish the amount of blood in the veins and increase it in the arteries is, by simply increasing the force of the heart's action by causing the ventricles to contract more vigorously and forcibly than before. As we thus increase the propelling power from behind we increase the amount of blood in the arteries, and at the same time diminish the amount in the veins. This is the plan we usually adopt in cases due to cardiac disease, emphysema of the lungs, aneurysm of the aorta, pericarditis with effusion into the pericardial sac, and the like. In order to accomplish this end, there are two drugs that seem to have more effect than any others over this condition. These are, in the first place, digitalis, a drug that has been in use a number of years, and the effects of which we understand moderately well. Another drug acting in the same way is convallaria. This is a medicine that has only been used for a moderate length of time, and our knowledge of it is less extensive than of digitalis. Whenever you give either of these drugs for this purpose, you should do it with a definite idea in your mind of what you desire to accomplish. When you give digitalis, you should not do it simply because you have read or heard somewhere that digitalis is good for heart disease or for kidney disease, but in order to make the two ventricles of the heart contract more vigorously and forcibly, for it does produce this result. For this purpose the best preparation is the fluid extract, and that prepared by Squibb is the most reliable. You may give this, beginning, according to the age, strength, and condition of the patient, in doses of from two to five drops every three hours, and then watch its effect on the heart's action and the pulse, and see if there is any increase in the production of urine. If the urine is increased, this

shows you that you have increased the amount of arterial blood being thrown into the kidneys, and have diminished the quantity of venous blood contained in them. If you find that the dose you began with is not sufficient to accomplish this, then increase it and carry it up so that you give five, or ten, or even fifteen and twenty drops every two or three hours, according to its effect on the heart and urinary secretion. There are, however, some patients who are unable to take digitalis in any form, for they get its poisonous effects before it manifests its peculiar action on the heart. Here we may fall back upon the fluid extract of convallaria, in doses of from twenty drops to a drachm given every two or three hours, being guided by its action on the heart. This, then, is the second way of trying to relieve the venous congestion of the kidneys by increasing the heart's action. There is still another method that may be employed for obtaining the same result, and that is by causing a dilatation of the capillaries and small arteries, for then the blood can pass through them more readily, and so the balance of the circulation will be restored and you will get rid of the venous congestion. To accomplish this, we have two drugs which are very efficient—nitrite of amyl and nitro-glycerin. Their effect in dilating the capillaries and small arteries is very rapid and decided. Nitrite of amyl may be given by inhalation in doses of from three to five drops, and repeated every six, four, or three hours, as needed. Nitro-glycerin is usually given internally in a one-per-cent. solution in alcohol, one drop of which diluted with water is the dose, and this may be repeated every six, four, three, or two hours, according to its effect. In quite a good many cases you will get good results by combining the two plans I have last mentioned—that is, by increasing the force of the heart's action and dilating the capillaries, and often you will get better results from this treatment than by attempting to carry out only one indication. These, then, are the only means at our command for restoring the circulation to its natural condition. This is the object that you would first try to accomplish, but, in addition, you would try to do something to relieve some of the various symptoms which help in making patients so very uncomfortable—I refer to the sleeplessness, restlessness, and dyspnœa especially. If you can relieve these, you will make the patient comparatively comfortable. For this purpose the one drug that is of most service is opium, and it is the only one that has much effect. You need not hesitate to use it, even though the patient is passing only a small amount of urine. But in these cases you must begin with small doses and watch their effect, and see whether the urine is passed in the same quantities as before, and what its influence is over the restlessness and sleeplessness. You will often find in this way that it can be well borne, and many can take ten to twelve minims of Magendie's solution every three or four hours. But in other cases a single such hypodermic as a starting dose may cause death within two hours. If it is well borne, you should give enough to induce sleep and make the patient comfortable. In bad cases, which do not tend to recovery at all, but go on to a fatal termination, the dyspnœa may not be controllable by any dose of opium, and then it seems to be no more than fair to allow the patients to inhale ether or chloroform in

small quantities at intervals, so as to keep them slightly under its influence during the last few days of life, for otherwise they would suffer for days with the dyspnœa which no amount of opium seems to relieve, and then would finally die exhausted.

As to the diet of these patients, they are usually fed to best advantage on fluid forms of food, such as milk and beef-tea and the like, and if they have much disturbance of the stomach, then a little lime-water, or some of the alkalies, or a little oxalate of cerium may be added to the milk. If the skin is very dry, sometimes the induction of a diaphoresis will make them more comfortable for a time. The bowels should be kept open and a little loose. This, then, is the ordinary way of managing these cases: first, by trying to remove the cause which induces this condition in the kidneys, and, second, by attempting to relieve the accompanying symptoms of sleeplessness, restlessness, and dyspnœa, and finally by attention to the diet, and to the condition of the stomach, skin, and bowels.

Original Communications.

SOLID TUMORS OF BOTH OVARIES, WITH A FIBROID POLYPUS OF THE UTERUS.—DIAGNOSIS WITH THE AID OF THE MICROSCOPE.

REMOVAL OF BOTH TUMORS WITH THE UTERUS.*

By MATTHEW D. MANN, A. M., M. D.,

PROFESSOR OF OBSTETRICS AND GYNÆCOLOGY IN THE UNIVERSITY OF BUFFALO; CORRESPONDING FELLOW OF THE NEW YORK OBSTETRICAL SOCIETY.

A GOOD deal has been written lately regarding the value of the microscope as an aid in the diagnosis of supposed ovarian tumors. Nearly all the evidence furnished has been against the value of the microscope, and especially against the asserted pathognomonic character of the so-called ovarian corpuscle of Drysdale. Some writers, while seeking to throw doubts on the specific character of this corpuscle, have gone too far and denied all value to microscopical observations in this connection.

It is rather the fashion at present for clinical observers and operators to belittle and run down the value of the microscope in the diagnosis of tumors. The reasons for this I have discussed in another place,[†] and will not rehearse them here, only saying that it comes largely from ignorance as to the true place which the microscope should hold as an aid to diagnosis. If used in the proper way, and with the proper spirit, and with, of course, the necessary skill, it affords the intelligent interpreter much valuable information, and thus often enables him to get an idea as to the true nature of a case which, without it, would have remained an impenetrable mystery.

* Presented, with specimens, before the New York Obstetrical Society, May 15, 1883.

† "Buffalo Medical and Surgical Journal," March, 1883.

"We must not expect too much, but take the teachings of the microscope in conjunction with the clinical features of the case, supplementing one with the other and putting the whole together in one comprehensive picture. In this way we shall rarely be misled, one method correcting the possible errors of the other. As to the Drysdale corpuscle, I do not believe in its specific nature any more than I believe in the cancer cell. But this is very different from throwing over entirely the diagnostic value of the microscopic examination of doubtful abdominal tumors.

The case now to be detailed is a striking example of what aid may be obtained in this way. Without the microscope no certain diagnosis could have been made, except by resorting to an exploratory incision, the indications for which were hardly sufficiently strong to warrant it before the character of the contents of the tumors was ascertained.

CASE.—I was asked by Dr. Crawford, of Buffalo, to see Mrs. S., aged forty-nine, the mother of four children, the youngest being twenty-six years. The first and fourth deliveries were instrumental, and were followed by fever and great pain, and tenderness in the pelvic region. In 1867 she had a pelvic abscess, which broke into the rectum. Following this there was constant trouble with the bladder and rectum. In January, 1882, she had a severe chill, followed by fever, nausea, and vomiting, and pain and tenderness over the abdomen, worse in the pelvis. There was a burning pain in the bladder and urethra, with constant desire to empty the bowels and bladder. She grew constantly worse, was greatly depressed, and nearly helpless. The bladder could only be emptied in the knee-chest position, and copious enemata and prolonged efforts, lasting sometimes for hours, were necessary to empty the bowels. Rest and sleep were impossible except under the influence of powerful opiates. The abdomen also began to enlarge. I saw her in October, 1882. At that time she was a great sufferer, reduced in strength, emaciated, with nearly constant elevation of temperature (102° and more), and frequent attacks of vomiting. An examination revealed the presence in the abdominal cavity of a large, nearly solid mass, which filled the cavity of the pelvis and reached to the umbilicus. A little to the right of the median line there seemed to be a groove dividing the tumor into two. A vaginal examination showed the uterus to be fixed in a mass of old inflammatory effusion, which made it impossible to feel the supra-vaginal portions, or to determine the relations of the tumor to the pelvic organs. Within the cervix and partly protruding from the external os there was a hard polypus of the size of a hen's egg. The uterine sound could not be passed.

Dr. Crawford stated that the intranterine tumor had come down into the cervical canal during the year of his attendance, and that it had diminished in size during its descent. It had formerly produced severe menorrhagia, but of late this had greatly abated.

As the abdomen was too tender to allow of a proper examination, I determined to put her under the influence of an anæsthetic, and remove the fibroid and make a thorough and careful investigation of the case.

This was accordingly done, the fibroid was easily twisted off, and the base cauterized. The uterine sound was then passed, and the uterus found to be pressed backward in the pelvis, to be only a little enlarged, and quite firmly fixed. On carefully palpating the abdomen, I found that the tumor seemed to be really two tumors. They were firm, but somewhat elastic, and I thought I could detect deep-seated fluctuation; but all who have tried know the extreme unreliability of this sign, even in the hands of experts. The tumors seemed to be firmly adherent

in the pelvis, but what their points of attachment and origin were it was impossible to determine.

Here, then, was a case where the history and the results of palpation and percussion, the methods on which we chiefly rely in such cases, were unable to furnish sufficient data on which to base a diagnosis. The tumors might be fibroid. The fact that they were multiple, that a fibroid was known to have existed in the uterus, their attachment to the pelvis, and their firm consistency, all pointed in this direction.

The fluctuation, if there were any, might be due to a cyst formation in the tumor, a no uncommon event in the history of a fibroid.

On the other hand, they had grown somewhat rapidly, while the fibroid had not increased at all, but had rather diminished. The uterus was not much enlarged, and, moreover, double ovarian tumors, supposing them to be of this nature, were not so very uncommon. My opinion was strongly in favor of their uterine origin, but I did not feel satisfied. There seemed to be but two ways out of the difficulty—aspiration, with a microscopical examination of the matter which might be withdrawn, and an explorative incision. The former, as being much simpler, and, if done with proper precautions as to cleanliness, almost entirely harmless, was my choice. I therefore introduced a long, fine needle slowly into the left tumor, this seeming to be rather the softer. When the needle had reached the depth of about three inches, a thick, yellowish fluid, slightly stained with blood, began to pass slowly through the tube. About half a drachm in all was obtained, and the needle withdrawn. Pending the result of an examination of this fluid, the patient was put on tonics, with the hope of benefiting her general health. Under the microscope, the fluid withdrawn by the aspirator showed a multitude of small cells which corresponded to all the tests for Drysdale's corpuscles. In size they were about the same as pus cells, though they were more variable, some being much larger, and the majority rather smaller. Besides these there were a few large, compound granular corpuscles and a very few cylindrical epithelial cells. The result of this examination showed to my satisfaction that the tumors were most certainly not fibroid in character. A fibroid might contain pus corpuscles, which I might possibly have mistaken for the ovarian corpuscle, but a fibroid or fibro-cyst could never contain cylindrical epithelial cells, so that, even throwing out the corpuscle in question, the microscopic evidence was strongly against a fibroid, and entirely in keeping with the ovarian theory of their origin. Not feeling perfect confidence in my own opinion, I sent some of the fluid to Dr. Drysdale, who was kind enough to examine it, and returned the following report:

"I have examined the specimen sent me, and think it is from an ovarian tumor."

Feeling now quite sure of my diagnosis, I determined to make an exploratory incision, and, if possible, to remove the tumors. The patient in the mean time had not improved at all. The morning of the day of the operation was spent in vomiting. Her temperature had shown nearly a constant elevation, with a rapid and feeble pulse. She could not rest or sleep, and was ready for anything which afforded a chance of relief, no matter at what risk. I operated November 7, 1882, at 2 o'clock p. m., assisted by Drs. Crawford, Mynter, and a number of other gentlemen. The patient was etherized, and an incision made in the linea alba about three inches in length. On introducing the hand, I found the tumors to be unattached above the brim of the pelvis, except a little posteriorly and slightly to the omentum. They were both closely attached to the uterus, one on either side. At the brim they were held by thick, broad bands, which bound them firmly everywhere to the pelvis. They were also attached to each other, though the adhesions were not very

strong. The uterus was pushed backward. In the left tumor, which was the larger, there were several small cysts.

Thinking that the tumors could be removed, though the operation promised to be an exceptionally difficult one, and taking the woman's desperate condition into account, I determined on the radical operation. I first enlarged the abdominal incision to six inches, and then emptied the two larger cysts. The adhesions were broken through with the fingers as far as possible, and separated into bands, which were then tied with carbolized silk and burned off with the thermo-cautery. It was very difficult to separate the adhesions and get them into shape for tying, and a great amount of force was necessary. My hand became so fatigued as to be nearly powerless, and I was obliged to call upon Dr. Mynter to work for a few minutes while I rested. The attachments of the right tumor to the uterus, to its fellow, and to the sides of the pelvis were easily torn through, and did not bleed to any extent. There was no distinct pedicle on the right, but on the left the pedicle was broad, thick, and short; it was divided by the thermo-cautery. As to its exact nature I was in doubt, but it proved to be the cervix uteri. When the tumors were both finally removed, the abdominal cavity was carefully cleaned and search made for bleeding points, but none were found; very little blood was lost. The wound was quickly closed by deep sutures of silver wire, and dressed with cotton wet in a solution of boroglyceride (1 to 20), with dry cotton outside, the whole held in place by a bandage, no adhesive straps being used. The operation was very long and severe, and the amount of shock exceptionally great. It was necessary to suspend the ether and give frequent hypodermics of brandy during the final steps, in order to get the patient off from the table alive. The latter part of the operation was therefore a good deal hurried.

At 6 o'clock P. M. she suffered great pain, with nausea and vomiting; pulse 130, and temperature 96° ; extremities cold, but, under the free use of brandy and heat, she gradually rallied. During the night she urinated into a bed-pan, with great ease, for the first time in over a year. The urine was drawn by a catheter for a few days afterward, but this was soon given up, as she preferred the bed-pan. The first night she slept a short time under the influence of morphine, and in the morning had rallied and felt very comfortable.

On the evening of November 11th (5th day) the temperature for the first time went above 100° , reaching 101° , with a pulse of 98. The next day it rose to 101.75° ; pulse, 120; skin hot and dry, tongue dry, expression bad, and slightly delirious. At the same time a tender swelling developed over the left parotid region, and the outlook was very discouraging. On the following day the swelling had increased, but the temperature and pulse were lower. On the 15th (8th day) she was decidedly better, swelling decreased one third, pulse and temperature still somewhat higher in the evening. She improved steadily from this time. On the 19th she had a good deal of pain in the abdomen, and, on removing the dressing, a small abscess was found to be forming on the left side of the wound, evidently between the layers of the abdominal walls. Parotid swelling nearly gone. She continued comfortable, though with an evening temperature of 102° until the 22d, when fluctuation was apparent and the abscess was opened. There was considerable sloughing of the skin over the abscess and in its neighborhood, but, under a dressing of boroglyceride, the cavity healed rapidly by granulation. The patient has since then recovered a fair share of health, but is a good deal troubled by the irritable state of the bladder and by the pressure of the pelvic effusion on the rectum.

A curious fact is that, although both corpus uteri and ovaries are gone, there have been several uterine hæmorrhages,

twice so severe as to require a tampon. Each time they have followed straining at stool. They are growing less, and will, doubtless, soon cease. The pelvic roof is as hard as a board, and the presence or absence of the uterus could not be determined by palpation.

The formation of an abscess between the layers of the abdominal walls, probably within the sheath of the rectus muscle, with sloughing, may, perhaps, be accounted for by the injury done during the forcible breaking up of the adhesions and extraction of the tumors. Possibly the reduced condition of the patient had something to do with it. The antiseptic dressings slipped partly off on the second day, and were replaced without any disinfection, so that it can not be called a failure of antiseptic surgery.

One of the most interesting points in the case is the occurrence of the swelling of the parotid with perfect recovery. That it had its cause in septic processes can scarcely be doubted, the point of origin having been in the abscess. I made a very grave prognosis on its occurrence, having always looked upon it as a symptom of almost necessarily fatal import, and was proportionately gratified by its rapid subsidence. The believers in medication might attribute the rapid recovery to sulphide of calcium (gr. $\frac{1}{10}$, q. h.), given with the idea of preventing suppuration.

About the same time a case occurred in the Buffalo General Hospital of a lad with a pistol-ball in his abdomen, where the same symptoms developed, and with the same result—i. e., perfect and rapid recovery. The operation was done under a spray of boroglyceride, 1 to 20. I have used it in four ovariectomies since, and in each case there has been a prompt aseptic convalescence. My experience with carbolic spray in abdominal section has made me afraid of it, but in boroglyceride we have a substance which is quite as good a preventive of putrefaction, while it possesses none of the poisonous, irritating, and benumbing properties of the acid. Although recent experiments tend to show that a spray does not destroy aerial germs, still it certainly keeps the tissues which are exposed to the air, and so to it, moistened with an antiseptic solution, and serves as a sort of irrigation, the only irrigation which is generally allowable in the abdominal cavity. It is almost needless to say that hands, instruments, and sponges were thoroughly cleaned.

A careful examination of the specimen will show that with the left and larger tumor I removed the whole of the corpus uteri as far as the internal os. The removal of this organ was unpremeditated, but an examination of the specimen will show that it would have been almost impossible to separate the tumor from it. The tumor evidently grew between the folds of the broad ligament, pushing this upward and outward, and this was the cause of the exceedingly firm adhesions which I found gluing the tumor to the pelvic brim. Enucleation of the tumors from between these folds would have been impossible, and the only way was to break them up into bands and tie these one by one. Below these bands, which made a sort of a diaphragm across the roof of the pelvis, the adhesions were soft, and easily separated.

The stump of the uterus should, according to expectation, have given a great deal of trouble from hæmorrhage,

but it did not bleed at all. May this not be taken as a point in treating the pedicle in hysterectomy? If the cautery will stop the hæmorrhage, why is it not better, after tying the uterine arteries separately, to treat it in this way than by the extra-peritoneal method with the clamp? We commonly divide the cervix by the cautery in amputation for cancer, and, although we sometimes have trouble from secondary hæmorrhage, still this is rare, and would not be so likely in the case of a stump left in the peritoneal cavity as in one left to slough and ulcerate in the vagina.

I have not examined the specimens microscopically, but the tumor seems to be an ordinary adeno-cystoma with excess of adenoid formation.

BUFFALO, May 3, 1883.

THE AMERICAN MEDICAL ASSOCIATION AND THE MEDICAL CORPS OF THE NAVY:

AN OPEN LETTER TO THE SURGEON-GENERAL OF THE NAVY.

BY ALBERT L. GIHON, M. D.,

MEDICAL DIRECTOR, U. S. NAVY.

PHILIP S. WALES, Esq., M. D., *Surgeon-General, U. S. Navy, Chief of Bureau of Medicine and Surgery, Navy Department, Washington, D. C.*

SIR: My official responsibility to yourself, by whom I was detailed to represent the Medical Corps of the Navy at the recent meeting of the American Medical Association, as well as a sense of justice to my colleagues in the corps in whose name I acted, renders it proper that I should formally explain the circumstances attending the presentation of my paper, entitled "Medical Education the Fundamental Fact in Medical Ethics," before the Section in State Medicine. Before going to Cleveland I had submitted this paper to yourself as the official head of the corps, that I might be assured I correctly represented its views, in which assurance I was further strengthened by those of our professional associates whom I had the opportunity of consulting.

Subsequent to my selection, by the Committee on Nominations, as one of the vice-presidents of the association, I was advised that an incomplete newspaper report of this paper had been made the basis of a charge that I was hostile to the code of the association, to which, with others, I had subscribed on registering as a delegate; and I requested my friend, Dr. McMurtrie, of Louisville, Ky., to introduce the subject in the committee, that opportunity might be offered for such objection, with the discovery that it was based on my assumed advocacy of a faction in the profession as against another faction, a position I had carefully endeavored to avoid, having presented the paper in the interest of peace and harmony, and with the very object of establishing that the common ground on which all educated physicians should stand made such dissension unnecessary; and I, consequently, did not hesitate to satisfy the committee, by a pencil memorandum hastily written on the moment, that "I adhered to the code of the association, and opposed any violation of it." This memorandum unde-

signedly came before the association in an informal manner, and was reported in the press, with various additions, amplifications, and exaggerations, to the effect that I "stood by the old code *first, last, and all the time*," I was a "firm believer in the code *in all its parts*," that I had "backed down," "recanted my *heretical* opinions," etc.; but my official duties as Member of the Board of Inspection of the Navy compelled me to leave Cleveland without giving the matter other notice. I took the opportunity, however, when transmitting the manuscript of my paper through the secretary of the Section in State Medicine for publication in the journal of the association, to append the following detailed statement of my understanding of the true intent of the code. I have since submitted this statement to some thirty or more members of our corps, and am assured, without exception, that it correctly represents their individual views:

It is almost an insult to the intelligence of the readers of the journal of the association to explain that this paper is not intended as a sectarian attack upon the organic law of the American Medical Association; but, as this interpretation has actually been given it by over-sensitive partisans, I deem it proper to reaffirm my loyalty to the code to which I have subscribed, without, however, surrendering the right which, in common with every intelligent man, I claim to criticise what I may think objectionable, and to call attention to the inconsistencies of its avowed adherents, who, attempting to observe its letter, ignore its spirit. I fail to see why honest advocates of its principles should be placed in an attitude of "rebellion" for merely defining these principles by the more liberal light of this day. The code properly interdicts any admission of the orthodoxy of the professors of exclusive dogmas, whether of homœopathy, allopathy, hydropathy, or the like, but it nowhere prohibits the intelligent physician giving his advice to any one whomsoever who may seek it, especially when emergencies and dictates of humanity demand. No one can more energetically discountenance than myself the impossible co-treatment of any case of disease by an educated physician on the one hand, and a charlatan, empiric, quack, or ignoramus, however "regular," on the other; but it is quite another matter when one's own opinion is solicited in behalf of suffering humanity. I have yet to hear of any of our profession soliciting an opinion from any of these, and without such an interchange of views there can scarcely be considered any *consultation*, in the sense of the clinical co-operation properly denounced by the code. Any narrower assumption will, as I have endeavored to show in this paper, necessitate the ostracism of those of our distinguished colleagues who *have* associated as fellow *medical* members with homœopaths and eclectics in the professional work of the National Board of Health, State Board of Health, Board of Medical Examiners, etc., and I feel assured that the overwhelming sentiment of the American Medical Association will be in favor of the liberal interpretation I have here given the code, with the previous knowledge and approval of the Surgeon-General of the navy.

Further comment is hardly necessary in advance of the publication of the paper, which I fear will scarcely be found to deserve the prominence given. It will have failed in its purpose if it does not convince its readers that the ethical platform reared upon a foundation of thorough medical education is the one, and the only one, on which every intelligent member of the profession can rightly stand. The attempted division of the profession into rival camps of *old*

coders and new coders is deplorable and entirely unnecessary, and I protest, as an individual, and in the name of the corps I represent, whose professional escutcheon is without blot or bar, against being made a party to it. A cast-iron code of any sort is as impossible as a rule of conduct as would be the attempt to define a Christian by a rigid declaration of faith to which all men must subscribe without question, or to devise a set of pocket rules for genteel behavior as an inflexible guide for a well-bred gentleman. When the profession shall have rid itself of ignorant, illiterate, and incompetent pretenders, there will be no question as to what is right and what is wrong; but this is not to be accomplished by driving out of the association those who, having an equal right there, choose to interpret their creed for themselves, and who find the existing code wide enough and broad enough to permit that freedom of action to which every honorable and intelligent member of society, whatever his vocation, has an inherent and inalienable right. When this is demonstrated to be impracticable (and this has not yet been done, and can not be done without full, fair, and unrestrained discussion), the remedy will be found not in devising other codes to be new bones of contention, but in doing away altogether with what, having been originally merely a liberal declaration of principles, has been sought to be converted into a narrow party platform.

I have the honor to be, very respectfully,

Your obedient servant,

ALBERT L. GIBON,

Medical Director, U. S. Navy.

"THE HAMILTON," WASHINGTON, D. C.,

June 15, 1883.

THE ORIGIN OF CREPITANT AND SUB-CREPITANT RÂLES.

By D. M. CAMMANN, M. D.,

LATE ATTENDING PHYSICIAN TO THE NEW YORK DISPENSARY, CLASS OF DISEASES OF THE HEART AND LUNGS.

It may, I think, be proved, by logical deductions from physiological facts, that crepitant and subcrepitant râles are not produced in the smaller bronchi and air-vesicles; and that they, as well as coarse or "mucous" râles, have their origin within the pleura, has been made evident by the records of many post-mortem examinations.

Two views are held by authors who assert that the crepitant râle has its origin within the air-cells. One is that the râle is produced by the agitation of fluid within the air-cells; the other, that as the air-vesicles are dilated in inspiration their walls are suddenly separated from their fluid contents to permit the passage of the current of air, and that these râles may sometimes arise from the sudden separation of the cohering walls of the alveoli quite independently of the existence of any trace of exudation.*

The subcrepitant râle is supposed to have its origin in the smaller bronchi, and to be caused by the bursting of bubbles of air.

If these views are true, the respiration must have considerable force in the air-vesicles and smaller bronchi, or at

least there must be a current of air passing in and out with each respiration. But physiology teaches that this does not occur. The change that takes place in the air in the air-cells and smaller bronchi is not by currents of foul air passing out in expiration and currents of fresh air passing in with inspiration, but the change is governed by the well-known law of the diffusion of gases. "This diffusion is constantly going on, so that the air in the pulmonary vesicles, where the interchange of gases with the blood takes place, maintains a pretty uniform composition."*

"By diffusion," says Foster,† "the new or tidal air gives up its oxygen to and takes carbonic acid from the old or stationary air. In this way, by the ebb and flow of the tidal air, and by diffusion between it and the stationary air, the air in the lungs is being constantly renewed." "Now, it is obvious if no provision existed for mingling the air inspired with the air already occupying the lungs, the former would penetrate no farther than the larger air passages. The change [in the air in the lungs] must be attributed to the 'mutual diffusion' of gases, these tending to interpenetrate one another, when of different densities or of different temperatures."‡

That such is the case is evident from the fact that only about one tenth of the air in the lungs is changed in each respiration. When one lung is crippled by disease the other lung does extra work, as is evidenced by harsh respiratory murmur over the unaffected side, and the diseased lung receives less air than usual at each respiration. And yet it is over such a lung, receiving a small amount of air and in which there can not be currents in the smaller bronchi and air-vesicles, that crepitant and subcrepitant râles are often heard. That râles may arise from the sudden separation of the cohering walls of the air-cells is contrary to the teachings of physiology. The air-cells do not collapse in expiration; nine tenths of the air in the lungs at the end of inspiration remains at the end of expiration. That râles may arise in air-cells partially filled with exudation by the separation of their adhering sides seems more probable. But it must be remembered that little air enters the parts of the lung where the exudation has taken place; there can be little or no current; the lung is crippled, and expansion and contraction take place to a very limited extent. Has any satisfactory proof ever been adduced to show that crepitant râles are naturally produced under this condition? I think not. On the other hand, that crepitant and subcrepitant râles are produced within the pleura has strong evidence in its support.

Cases are on record* in which râles were heard a short time before death, and, on post-mortem examination, pleuritic exudation was found in the same situation while the lung beneath in some cases was not diseased; in others there was consolidation, so that no air could have entered the lung in the neighborhood where the râles were heard. To test the correctness of these views, advantage was taken of the large

* Flint, "Physiology," vol. i, p. 407.

† Foster, "Physiology." London, 1877, p. 219.

‡ Carpenter, "Physiology." Philadelphia, 1853.

* "Physical Signs of Interpleural Pathological Processes." Dr. J. R. Leaming, "Med. Record," May 25, 1878.

* "Physical Diagnosis." Guttman.

number of cases of pleuro-pneumonia which destroyed so many cattle a few years ago. "In 1879 a commission was appointed by the United States Government having for its object the stamping out of contagious pleuro-pneumonia among cattle. In August of that year Dr. Leaming was invited to make examinations of some of these cattle, and his diagnoses were to be tested by post-mortem examinations performed immediately.* In every case where râles had been heard, pleuritic exudation was found, and where pleuritic exudation was found there had been râles. In six of these cases one lung was completely consolidated; therefore, no air could enter and no râles be produced in them."

Those who are accustomed to make post-mortem examinations know how frequently extensive pleuritic adhesions are disclosed, and cases are not infrequent in which there is little disease of the lung beneath.† In these cases an abundance of râles of different sizes are often heard, but they are usually diagnosed as intrapulmonary, and, therefore, the result of the autopsy is a surprise to those who make it.

I can find nothing in the details of carefully recorded cases to disprove these views. The cases recorded by Laennec‡ and by Louis§ show that crepitant and subcrepitant râles were only heard over the site of pleuritic adhesions.

If the views expressed in this paper be true, it follows that some sweeping changes will be necessary in our present interpretation of physical signs. Therefore, the facts here advanced should be carefully weighed before being accepted. Facts, however, as opposed to theory, will always be accepted in the end, and in this paper I have endeavored to show not only that fine râles can not be produced within the lungs, but that they are in fact produced within the pleura.

ON ONE OF THE DANGERS THAT MAY ARISE AFTER TRACHEOTOMY.‖

By EDWARD L. PARTRIDGE, M. D.,

PROFESSOR OF OBSTETRICS IN THE NEW YORK POST-GRADUATE MEDICAL SCHOOL.

The specimen here shown is the larynx of a child, two years of age, upon whom I performed tracheotomy on the 8th of March, at the Nursery and Child's Hospital, for the relief of symptoms due to diphtheria.

When the child was taken sick the diphtheritic membrane was to be seen on both tonsils and on the uvula. The constitutional symptoms were not very severe, the temperature ranging below 103° F., and the pulse being of fair strength and easily counted, although soon afterward it reached 150. At the end of two days there were indications that the larynx had been invaded; the respiration was somewhat quickened and difficult, the dyspnea affecting both inspiration and expiration, and there was a lack of the physiological period of rest between these two acts.

* J. R. Leaming, M. D. Art. "Endemic Pleuro-Pneumonia." "Med. Gazette," February 7, 1880.

† Delafield, "Pathological Anatomy." Case, p. 28.

‡ Laennec on "The Chest." § Louis on "Phthisis."

‖ Being the substance of remarks made on presenting the specimen at a meeting of the New York Obstetrical Society, March 20, 1883.

The child's condition grew worse during the forty-eight hours following the invasion of the larynx; cyanosis was becoming manifest, and it was the opinion of those of my colleagues who saw the patient with me that tracheotomy should be performed at once. The operation was done with comparative ease; the large veins were avoided, so that very little hæmorrhage took place, and a tracheotomy tube was introduced. The tube was somewhat faulty in construction, but it was the only one at hand. It was faulty because when in its place in the trachea the situation of the fenestra in the outer tube, which opens upward toward the larynx, was so far forward as to be entirely anterior to the lumen of the trachea. Laryngeal respiration could not take place, therefore, without removal of the tube.

The patient's condition improved immediately; the pulse fell to between 120 and 130, the temperature sunk to 102°, and respiration through the tube was quite free. Very little discharge of mucus took place through the tube for the first twenty-four hours, and there seemed good ground for hope that recovery would ensue. Thirty hours after the operation, however, the house physician fancied that the child was not breathing quite so freely as it had been doing, and sent for me. I found the patient doing comparatively well, but, thinking there might be some advantage in another and more suitable form of tube, I proceeded to make the exchange. The child continued to breathe freely after the removal of both the inner and the outer tube, but, when the new one was introduced instead, it ceased to breathe, and immediately began to show signs of impending suffocation. A probe was hastily passed through the tube, and it entered without difficulty, but the breathing was not improved. The first tube was then replaced, but without benefit; it was withdrawn and a catheter was inserted. Air passed through all these tubes, but so imperfectly that the child's face began to grow livid, and in less than five minutes death took place.

But one explanation of the occurrence suggests itself to me: that on the introduction of the second tube a portion of the diphtheritic membrane was detached, and almost completely blocked the lumen of the trachea just below the tube. At the post-mortem examination the membrane was found to extend down the whole length of the trachea, and a short distance into the bronchi.

The case seems to illustrate the danger of the early removal or exchange of the tube. I am aware, however, that there is excellent authority in favor of the practice. Indeed, Bonnet believes that the most important point in the after-treatment consists in the daily removal of both tubes after the second day; first, in order to ascertain whether the patient can or can not breathe through the larynx, and, second, to guard against the overgrowth of granulations at the upper end of the wound.

A METHOD OF CLEANING CATHETERS.—A correspondent of the "Lancet" says: "Take a cork of a more conical form than that commonly used, with a hole made through it longitudinally; pass the catheter through the hole, and fix the cork into the tap of an ordinary water-pipe (hot-water one preferable), and turn on the water. By so doing, the force of the water is greatly increased, and the catheter properly cleaned."

Book Notices.

A Text-book of the Diseases of the Ear and Adjacent Organs. By Dr. ADAM POLITZER, Imperial-Royal Professor of Aural Therapeutics in the University of Vienna, etc. Translated and edited by JAMES PATTERSON CASSELLS, M. D., M. R. C. S. Eng., Aural Surgeon to, and Lecturer on Aural Surgery at, the Glasgow Hospital and Dispensary for Diseases of the Ear. With 257 original illustrations. Philadelphia: Henry C. Lea's Son & Co., 1883. Pp. xii-800.

THE English translation of the great work of Politzer, in two volumes, comes to us in one large volume, complete in itself, and is the fullest and most exhaustive treatise upon the whole science of otology that has ever been published in any language. The first volume of the German edition was published at Stuttgart in 1878, and treated of the anatomy and physiology of the external and middle ear, the diseases of the naso-pharynx and membrana tympani, and the acute inflammatory and catarrhal affections of the middle ear. The second volume, published in 1882, considered the adhesive affections and purulent inflammations of the middle ear; diseases of the mastoid process and the external ear, and the relations between ear disease and life insurance; the anatomy, physiology, and diseases of the internal ear, including the labyrinth and the auditory nerve, injuries of the internal ear, cerebral disturbances of hearing, malformations of the ear, and deaf-mutism. The English translator has followed the same order in his translation, which, as will be seen, differs from that ordinarily employed in text-books. In considering the work as a whole, the first thing that strikes the reader is the large number of anatomical and pathologico-anatomical observations and illustrations, which place this work so far above any similar work on the subject hitherto offered to the profession. It is well known that Professor Politzer has for many years been among the most earnest workers and closest observers in the field of otology, and his contributions have always been marked by the most thorough and meritorious workmanship. The English translation is most admirable for the painstaking care manifested in combining literal exactness with clearness of expression. Of course, to the busy otologist and general practitioner the chief interest centers in the pathology and treatment of the diseases of the ear, and perhaps especially of those of the middle ear. That very large class of cases which come under the head of adhesive processes in the middle ear receives special attention, not only because they are so very frequent, but also because of the greater frequency of labyrinthine complications. Politzer thinks in these cases the affection of the middle ear and the labyrinth is produced simultaneously by similar trophic disturbances. In the treatment of this class of cases he has introduced a novel operation, that of division of the anterior malleolar ligament for retraction of the handle of the malleus. His opinion as to the real value of tenotomy of the tensor tympani muscle is somewhat unfavorable.

We do not think the author is justified in distinguishing so positively acute purulent inflammation of the middle ear without perforation of the membrana tympani, from acute otitis media. In many, perhaps the majority of cases, they differ merely in the occasional perforation of the drum-membrane. The recommendation of Politzer in obstinate cases of acute suppuration, to inject hot water into the middle ear through the catheter, seems to be well worth extensive trial, as a means of relieving severe pain, if for no other reason.

The chapters upon chronic suppurative processes in the middle ear are very complete and exhaustive, and are filled with valuable pathological and pathologico-anatomical observations,

especially with reference to the minute deep changes in the drum cavity and mastoid cells.

When we come to the chapters on the diseases of the labyrinth and auditory nerve, we find a much better and fuller description of this class of cases than exists in any other work; but Politzer, like every other author, has been hampered by the infancy of our knowledge upon this subject. This is mainly owing to the great lack of numerous and accurate post-mortem examinations of the ear in patients who have died from these diseases or from cerebral complications. Still, Politzer has given the best description of Ménière's disease, both in its simple and in its apoplectic forms, that we possess. The section upon the Diagnosis of the Diseases of the Auditory Nerve is admirably clear and well expressed. The author devotes a special section to panotitis, or that form of disease in which the middle ear and labyrinth are attacked by the inflammation either simultaneously, or the one very quickly after the other. This occurs chiefly in children in the course of *scarlatinal diphtheritis faucium*, or as an idiopathic affection. Another interesting section is the one which describes the New Formations in the Internal Ear.

Another section that is to be especially commended to the reader is the one upon Cerebral Disturbances of Hearing, because of the obscurity of knowledge which has hitherto been so general.

There is a final section upon Hearing Instruments for the Deaf, and in the appendix is a collection of therapeutical formulae occurring throughout the book.

Finally, we would say that the work is a monument of patient labor, quick observation, and keen insight, the whole illumined by the enthusiastic spirit of its brilliant author.

Alcoholic Inebriety from a Medical Standpoint, with Cases from Clinical Records. By JOSEPH PARISH, M. D. Philadelphia: P. Blakiston, Son & Co., 1883. Pp. 185. [Price, \$1.25.]

THAT which includes the subject of this work there is no branch of medicine demanding more pressingly from exponents and investigators the severest methods of science. Comprehending for its immediate and contingent subject-matter phenomena exceeding in variety and intricacy all others with which the physician has to deal, there are, above all things, required an unusual clearness of thought, the application of unimpeachable logic, and the most careful arrangement of matter and order of argumentation.

In these regards there are numerous shortcomings in the work before us, and on the score of them we must find fault with what in some respects is a commendable book. Under the heading "The Vice Aspect" we learn that nerve centers may be *disturbed* by a *latent* functional impulse. Again, at page 164, under "The Psychological Aspect of Inebriety," we find the following: "But let such a sluggishness be temporarily aroused, reawakened even by an artificial stimulant, and, whether it be an arousalment of psychical energy which is transmitted to the consciousness or representation, or by a combination of other forces or qualities, the fact is still apparent, and is vivid with instruction." "Arousement (!) of a sluggishness" is singularly out of place in a chapter engaged with the psychological aspect of any subject. The meaning intended to be conveyed by these and other improper verbal collocations and unskillfully constructed sentences is not "apparent," and they are not "vivid with instruction."

There are contained, nevertheless, some ably, and even eloquently, written passages, and we especially indorse the spirit of reasoned philanthropy with which the subject generally is treated.

The following quotations are taken from a summary of the conclusions to which the author has been led:

"Some persons are born with an alcoholic diathesis—that is to say, with an appetency for alcoholic beverages and a tendency to intoxication."

"It is the internal craving for alcoholic liquors and for their intoxicating effect that constitutes the disease, and not the fact of drunkenness."

"The most successful treatment is that which combines with wholesome restraint psychological and hygienic methods, such as are successfully employed in hospitals for inebriates."

Insanity: its Causes and Prevention. By HENRY PUTNAM STEARNS, M. D., Superintendent of the Retreat for the Insane. Hartford, Conn., etc. New York: G. P. Putnam's Sons, 1883. Pp. xii-248. [Price, \$1.50.]

DR. STEARNS'S large practical experience among the insane admirably fits him for the task he has undertaken, which is one that implies the consideration of insanity in its ætiological relations; but in some respects the book resembles Tuke's excellent little work published several years ago.

After the preliminary discussion of the prevalence and increase of insanity among savage and civilized peoples, he proceeds to the consideration of the influence of education, heredity, consanguineous marriages, alcoholism, poverty, religion, and insufficient sleep. Dr. Stearns's suggestions are practical, but commonplace, and what he says has been gone over again and again. His words have, however, the merit of directness and truth, and his conclusions are based upon much study of mental disease and association with the insane. The book is one for the public rather than the medical profession, and must have its good influence. The evils of over-study and injudicious teaching are pointed out, and the author strongly urges the advisability of not treating all children alike in the matter of brain work. In regard to heredity, useful hints are given to parents who have "queer" children. Dr. Stearns points out the mental peculiarities that some children present, and which are, after all, forerunners of what may be grave psychical defects in adult life. He thinks that special care and training should be provided for the "precocious," the "passionate" or "cruel," the "timid," the "willful," and the "lonely" child. We would suggest that "the eccentric" and "the stupid" should be added to the list.

Much useful personal research has been made by Dr. Stearns, and we find upon every page something of interest and instruction.

Mental Pathology and Therapeutics. By W. GRIESINGER, M. D., Professor of Clinical Medicine and of Mental Science in the University of Berlin, etc. Translated from the German (second edition) by C. LOCKHART ROBERTSON, M. D. Cantab., etc., and JAMES RUTHERFORD, M. D. Edin. New York: William Wood & Co., 1882. Pp. viii-375. [Wood's Library of Standard Medical Authors.]

THE original edition of this work was placed before the medical profession in the year 1845. Sixteen years later a second edition was issued, and this was translated from the German and published as one of the volumes of the New Sydenham Society's series in 1867. The volume before us is a reprint of that last mentioned, which is thus brought to notice after a slumber of sixteen years, and without alteration, note, or comment.

Antiquated, therefore, as the work may seem to be in these days, when a publication relating to any scientific subject is often old in a year, no one who desires an acquaintance with mental pathology and therapeutics can afford to neglect Griesinger's book. The views of its author are so decided, and when he wrote were so far in advance of his time, that they

mark an era in the progress of psychological medicine. The author was one of the advance guard who, while they live, are the subjects of as much persecution as the spirit of the age allows, but who are pretty sure to get their just measure of distinction after their death. Even at the present day no one can pretend to a good education in alienistic science who is ignorant of the contents of Griesinger's "Mental Pathology and Therapeutics," and perhaps, all things considered, it is as well that it has been republished exactly as its author left it.

BOOKS AND PAMPHLETS RECEIVED.

The Scientific Transactions of the Royal Dublin Society. Vol. I (Series II), Parts xv, xvi, xvii, xviii, xix; Vol. II (Series II). Dublin, 1880-'82.

The Scientific Proceedings of the Royal Dublin Society. Vol. III (New Series), Part v, August, 1882.

Hospitals, Infirmarys, and Dispensaries: their Construction, Interior Arrangement, and Management; with Descriptions of Existing Institutions, and 74 Illustrations. By F. Oppert, M. D., M. R. C. P. L. Second (English) edition, revised and enlarged. London: J. & A. Churchill, 1883. Pp. xviii-278.

Physiological Cruelty; or, Fact v. Fancy. An Inquiry into the Vivisection Question. By Philanthropos. New York: John Wiley & Sons, 1883. Pp. vi-156. [Price, \$1.25.]

A Treatise on the Diseases of the Eye. By J. Soelberg Wells, F. R. C. S., etc., Professor of Ophthalmology in King's College, London, etc. Fourth American, from the third English edition, with copious additions. By Charles Stedman Ball, A. M., M. D., Lecturer on Ophthalmology in the Bellevue Hospital Medical College, etc. Illustrated with 257 engravings on wood, and 6 colored plates, together with selections from the Test Types of Professor E. Jaeger and Professor H. Snellen. Philadelphia: Henry C. Lea's Son & Co., 1883. Pp. xix-33 to 846, inclusive.

The Natural Cure of Consumption, Constipation, Bright's Disease, Neuralgia, Rheumatism, "Colds" (Fevers), etc. How Sickness Originates, and How to Prevent it. A Health Manual for the People. By C. E. Page, M. D., author of "How to Feed the Baby," etc. New York: Fowler & Wells, 1883. Pp. 278.

Record for the Sick-Room. Philadelphia: P. Blakiston, Son & Co.

Catalogue of the Albany Medical College, Medical Department of Union University, 52d Session, 1882-'83. And Announcement for Session 1883-'84.

Second Annual Announcement of the Iowa College of Physicians and Surgeons at Des Moines, 1883-'84.

Announcement of the Twenty-third Annual Course of Instruction at the Miami Medical College of Cincinnati, with a List of Matriculants and Graduates of 1882.

Malarial Poisoning the Cause of Hæmaturia. By W. O'Daniel, A. M., M. D., Bullards, Ga. Macon, Ga., 1883. Pp. 14.

Suture de la vessie pour une très grande plaie intra- et extra-péritonéale; réparation en deux actes opératoires éloignés; guérison. Par le Dr. S. Pozzi, professeur agrégé, etc. Paris, 1883. [Reprint from the "Annales des maladies des organes génito-urinaires."]

Announcement of the Third Annual Session of the Medical Department of the University of Denver, Colorado. Collegiate Year 1883-'84.

(University of the State of New York), 1883-'84. Prospectus of the College of Pharmacy of the City of New York.

Ninth Annual Announcement of Columbus Medical College, Columbus, Ohio. Session of 1883-'84.

Twelfth Annual Announcement of the College of Medicine of Syracuse University. 1883-'84.

THE
NEW YORK MEDICAL JOURNAL,
A Weekly Review of Medicine.

Published by
D. APPLETON & Co.

Edited by
FRANK P. FOSTER, M. D.

NEW YORK, SATURDAY, JULY 7, 1883.

THE DANGER OF A VISITATION OF CHOLERA.

EUROPEAN advices in regard to the prevalence of cholera in certain districts of Egypt, a summary of which will be found in another article, are apparently tinged with a spirit of panic, and in some respects amount to little more than a string of rumors. Nevertheless, the general tenor of the facts on which they seem to be founded is grave enough to raise apprehensions that the pestilence may find its way to this country. Some of the newspapers are playing the optimist, however, and regale their readers with suggestions to the general effect that cholera is now much more manageable than it was a number of years ago.

While it is undoubtedly true that in recent years we have made decided gains in our knowledge of the best means to follow for the prevention of the disease, and while there is abundant evidence that the community is year by year attaching more importance to sanitary measures in general, and in particular to those adopted as safeguards against great epidemics, it is to be feared that, practically, this is all that can be said. We doubt very much if cholera, once it had gained a foothold on our shores, would show itself remarkably more tractable than in bygone times. We are not aware that the treatment of the disease furnishes very flattering results even at the present time. At all events, those who remember even the mild epidemic of the year 1866 can scarcely look complacently upon the risk of even a little cholera in New York. It seems to us the part of wisdom, therefore, to look upon the danger as real, and to leave no stone unturned to ward it off.

On the other hand, the probability that the disease will gain a lodgment in the United States this summer is exceedingly small. In the first place, it has not yet crept along the Mediterranean to any of the ports with which our communication is at all considerable; and it has shown itself late, even for a country so far east as Egypt. Our direct commerce with the Egyptian ports is trifling, and it can not be said to be large with those countries in Europe to which the infection would naturally be first conveyed.

While, ordinarily, the lethargy of the Ottoman authorities in regard to sanitary measures, as well as in respect to all the rest of the machinery of civilization, might well give rise to the fear of a general infection of Europe by way of Turkey, there is a special element at work at the present time to offset that danger. We refer to the exceptional sense of responsibility which the British government must feel, apart from solicitude for the protection of its own people, from the fact of its having undertaken so leading a part in Egyptian affairs, including the matter of sanitation. It seems to us, therefore, that

the European powers that are said to have appealed to Great Britain to exercise the utmost vigilance in preventing the extension of the disease are justified, and that the world is justified, in looking to the British nation for a promptness and a thoroughness of action that should go far toward neutralizing the natural laxity of the Porte.

All these powers will, of course, add their own watchfulness to what they expect of England, and, as a consequence, the progress of cholera through Europe will be slow, even if it takes place at all. Such being the case, it is scarcely possible for it to reach the ports with which our commerce is chiefly concerned until so late a period in the summer that the danger of its crossing the Atlantic will have been effectually barred by the limitation of season. As a general rule, too, our cholera epidemics have begun in years following a European prevalence, so that it is rather for next year than this that the contingency of an inroad of cholera into Europe should excite uneasiness in America.

Still, our quarantine service can not be too stringently carried out. Considering the leading part played by New York as a port of entry, and especially as a landing-place for immigrants, the attention of the country will be turned mainly upon the health officer of this port as charged with the duty upon the faithful and enlightened performance of which the safety of our people depends. While it can not be denied that the medical profession would feel a greater sense of security if his predecessor were still at the helm, it is to be said in behalf of our present health officer that he has made a favorable negative record during the period of his incumbency. To be sure, he has not yet been tried under any great danger, but the present demand comes upon him not as upon one altogether unused to the technics of the office, so to speak; he has had ample time to familiarize himself with the routine of commercial sanitation, and he will be dull indeed if he overlooks the strict accounting to which the people will hold him in the event of any disaster occurring as a consequence of the inadequate performance of his functions. With the danger of cholera visiting us from the East, and of yellow fever drifting up the coast from the West Indies or from the Gulf, any remissness on the part of the health officer of New York would be nothing less than criminal. There is every reason to believe that nothing of the sort will take place, but that that officer will be found true to the interests of the State and of the nation.

A VICE-PRESIDENT OF THE AMERICAN MEDICAL ASSOCIATION ON THE QUESTION OF ETHICS.

WHATEVER honor may attach to the position of a vice-president of the American Medical Association, there are few men of any account in the profession, we fancy, who would forswear themselves for the sake of attaining to it; least of all should we look for men of such pusillanimity in the medical corps of the navy—a corps that has an unbroken record of honor. It was with the utmost incredulity, therefore, that we read the newspaper accounts of Dr. Gihon's having "backed down," and having uttered such drivel as that he "stood by the old code

first, last, and all the time," and so on. That our trust in the common sense of the medical corps of the navy was not unfounded, will be evident to all who will take the trouble to read Dr. Gihon's communication, which we publish elsewhere in this issue.

It seems that, in order to correct a misapprehension on the part of the Judicial Council, he simply made a written statement that he "adhered to the code of the association, and opposed any violation of it." It is very much to the credit of the Judicial Council that they quietly accepted this statement (which, by the way, might be made in good faith by many an opponent of the code), without catechising Dr. Gihon further, or insisting upon any more explicit presentment of his views. They had, indeed, no moral right to meddle with the matter at all, so long as Dr. Gihon was not specifically charged with having violated the code. Between the violation of a law, that is to say, the commission of an act forbidden by it, and the avowal of a doubt as to the wisdom of that law, there is the greatest possible difference. The one is an offense justly punishable by the law-making power; the other is but the exercise of that liberty of opinion that is the innate right of every man, woman, and child in the country.

Dr. Gihon's paper is on record, and can not be blotted out. That he has no desire to undo its effect, and that the corps he represented at the meeting does not cherish any such wish, is abundantly evident from the communication sent us for publication, including as it does the supplementary note sent by the author to the official journal of the American Medical Association. Even if the address itself had never seen the light, Dr. Gihon's letter to Surgeon-General Wales would amply suffice to place him and his colleagues before the profession in an independent attitude. How many of them in their hearts favor the continuance of the old code as it now stands, how many prefer the code of the Medical Society of the State of New York, and how many think it would be best to have no code at all, we have no means of knowing; the point is, that, whatever their views on the matter, they are resolved not to be cuffed into unthinking adoration of the policy that treats men as enemies simply because they dissent from the dominant sentiment in the association.

"I fail to see," says Dr. Gihon, "why honest advocates of its principles should be placed in an attitude of 'rebellion' for merely defining these principles by the more liberal light of this day." If the association as a whole had chosen to take this reasonable view, the breach that now exists among us would never have been brought about.

AN ALLEGED CASE OF CRIMINAL ABORTION.

It is not a common thing for a physician in good standing to be charged with criminal abortion. That fact, however, does not warrant the conclusion that abortionists are not to be found in the regular ranks, however gratifying it would be to be able to draw such an inference, for every practitioner of much experience knows that numbers of women either are unnecessarily mendacious, or else, as they profess, really find no difficulty

in getting "assistance" of a peculiar sort from one physician or another. This state of things can not be gainsaid; we can only deplore it. Moreover, there are men against whose character the world knows nothing, and yet in regard to whom some of their fellow-practitioners feel morally certain that they are defiled and debased by having followed the nefarious practice in question—only they can not prove it. No doubt many of these men are suspected unjustly, and, indeed, we believe that those who are really guilty are very few in number. As a matter of fact, it was only last week that this journal claimed credit for the profession on the score of the lofty stand it had never failed to take as a body in this matter; and we now recede not at all from the position we then took, but rather renew our expressions, for it is beyond question that sinners of this particular sort are rare, and only serve as the exception that proves the rule. In the interest of truth, however, their existence must not be ignored.

We bring these considerations forward at the outset for the purpose of showing that we are not disposed to attach too much importance to the presumption of innocence in what we shall say in behalf of a New York physician who is now held on a charge of criminal abortion. The circumstances of the case are these: Dr. David P. Austin, a practitioner whose career has been honorable, so far as we know—certainly one against whom no serious accusation has before been brought—is declared to have caused a woman's death by an operative procedure undertaken with the design of causing an abortion. It appears that the woman had visited him several times, and that on these different occasions she had been subjected to what she called operations. Shortly after her last interview with the doctor (excluding that in which he was brought before her for identification) she became seriously ill, and the physicians who were called to attend her broached the suspicion that she was suffering from the effects of a criminal interference with gestation. Under some pressure, she seems to have virtually confessed that such was the case, and to have stated that Dr. Austin had "operated" on her. Being confronted with the doctor, she declared him to be the person she meant, and soon afterward died. A post-mortem examination was made, and those who conducted it declare that the woman's death was due to metro-peritonitis induced by an artificial abortion. A coroner's jury found a verdict to this effect, and Dr. Austin is now on bail.

So far as it appears, this constitutes the evidence against Dr. Austin. As regards the autopsy, perhaps, the material facts concerning the cause of death were established by it, but we submit that it should not readily be taken to show a criminal intent, and, certainly, very little importance should be attached to the testimony of a man who swears, as one of the medical witnesses did in this case, that the woman could not have had a polypus removed last November, as asserted by Dr. Austin, *because no scar was found at the autopsy*. The abortion may, for all the examination is likely to have revealed, have been the result either of design, of carelessness, of unskillfulness, or of mere "misadventure." The ugly feature in the case, however, is the woman's ante-mortem statement. A woman on her

deathbed does not lightly accuse a man of having performed a criminal act. Still, the particular woman here alluded to may have meant only to convey the idea that the doctor's "operation" was, in her opinion, the cause of the trouble that was bringing her to the grave, without at all meaning to imply that the induction of abortion was the purpose he had in view. The report of the deathbed scene that comes to us will bear this interpretation, although its most obvious intent, it must be confessed, is to incriminate the doctor.

Speaking from what has thus far transpired, the doctor's defense rests on his own statement that his treatment of the woman was legitimate, *i. e.*, for the relief of disease, and that the abortion (if there was an abortion) and the consequent inflammatory trouble were what might happen to any woman undergoing gynecological treatment, provided she chanced to be pregnant without the physician being aware of the fact.

If Dr. Austin is innocent, this is almost the only defense that will serve him, and it is in no wise irrational or strained, for many a gynecologist sooner or later produces abortion unwittingly, although, he may be thankful, it does not usually end in death. Moreover, Dr. Austin's statement is materially strengthened by the husband's admission before the coroner's jury that several months ago he sent his wife to Dr. Austin for treatment. As the case stands, it would be improper to express an opinion as to the guilt or innocence of the accused, even if it were possible to form a definite idea. While the interests of humanity and those of the profession call for adequate punishment in case his guilt should be proved, for the credit of the profession we cling to the hope that his innocence will be established.

MINOR PARAGRAPHS.

THE MASSACHUSETTS STATE BOARD OF HEALTH, LUNACY, AND CHARITY.

THE nomination of Dr. B. A. Sawyer, of Duxbury, to a seat in the board is looked upon by some of the profession in Massachusetts as designed to introduce an element of discord, and make the old members of the board uncomfortable, owing to the fact that a lawsuit is now pending between the board and Dr. Sawyer in regard to an alleged nuisance in Duxbury. The Executive Council, it has therefore been suggested, ought not to confirm the nomination. Adverse action on the part of the Executive Council has been rendered unnecessary, however, by the withdrawal of the appointment.

COUNTER PRESCRIBING.

AN apothecary named Leman, doing business at No. 2038 Second Avenue, is under arrest, charged with having caused the death of a Mr. Vollmer by opium poisoning. It is alleged that Mrs. Vollmer went to Leman's shop and asked to be directed to "some good German physician," whereupon Leman persuaded her to let him prescribe for her husband. The next day Vollmer died, and two physicians decided that the death was from poisoning with opium. It is understood that Leman does not deny the charge that he prescribed for the man, but maintains that his prescription was harmless. One of the physicians in attendance is reported to have said, however, that this was

not the first case he had known of in which Leman's prescribing had been followed by fatal results.

ARMY AND NAVY SURGEONS AND THE MEDICAL SOCIETIES.

IT is always a matter of gratification when a medical officer of the army or navy takes part in the proceedings of a local society, and we are persuaded that gentlemen in the service have it in their power to contribute notably to the interest of such meetings. We are pleased to learn, therefore, that Assistant Surgeon J. H. Bryan, of the navy, lately reported two cases at a meeting of the Medical Society of the County of Kings.

FATAL EFFECTS FROM THE BEE'S STING.

ELSEWHERE in this number of the journal we print an extract from the "Lancet" going to show that the sting of the bee occasionally proves fatal. An additional instance, if we may credit a press dispatch, occurred last week in the town of Milan, in Tennessee. The report is, that a woman was stung on the nose, and died in a few minutes. If it should really prove that in a number of cases death may fairly be imputed to the sting of the bee, the matter will be well worth investigating. Ordinarily, as is well known, only a local irritation is produced. If we concede that the mosquito can implant the *Filaria sanguinis hominis* in a man's blood, it seems not unreasonable to conjecture that the bite or sting of various animals not usually venomous may be made so on occasions of their having fed upon some septic or noxious substance. It is highly desirable that well-observed cases of this sort should be put on record.

A CASE OF PORRO'S OPERATION IN PHILADELPHIA.

ON Friday of last week Dr. W. H. Parish performed Cesarean hysterectomy at the Almsbouse Hospital in Philadelphia, the patient being a dwarf. The woman survived until Monday, and at last accounts the child, which weighed six pounds, was doing well. The case seems to have excited considerable interest in Philadelphia, not only among the profession, but also among the newspaper reporters, judging from the head-lines, "Wonderful Surgery," "The Modified Cesarean Section Successfully Performed," etc., together with their detailed accounts of the steps in the operation, and the long lists they give of the physicians present. After all that, it seems somewhat cynical for the "Evening Post" of this city to record the woman's death under the caption, "The Victim of a Surgical Operation."

THE CHARITY ORGANIZATION SOCIETY.

FROM the First Annual Report of the Central Council, recently issued, an idea may be formed of the thoroughness and skillfulness with which the society has made its preparations for fulfilling its special aim, that of detecting impostors and preventing the "overlapping" of charity, that is to say, guarding against the same person receiving alms from any one organization while enjoying the beneficence of another. The evils which the society has undertaken to eradicate are formidable, and we trust that it will be able to accomplish its object. We are encouraged in this hope by the personal character of its promoters, among whom we are glad to find Dr. S. O. Van der Poel (the president), Dr. Mark Blumenthal, Dr. Richard H. Derby, Dr. John J. Milhau, Dr. C. A. Bacon, Dr. P. W. Cremin, Dr. F. S. Sewell, Dr. J. L. Barton, Dr. E. M. Kellogg, Dr. Henry Lassing, Dr. W. O. Moore, Dr. J. H. Emerson, Dr. S. F. Morris, Dr. H. G. Klotz, Dr. C. D. Scudder, Dr. T. C. Finell, Jr., Dr. H. E. Crampton, Dr. P. J. Lynch, Dr. J. R. Taylor, Dr. Stephen Smith, and Dr. F. R. Sturgis, besides whom several members of the profession have contributed funds.

NEWS ITEMS.

A NEW PROFESSOR OF OBSTETRICS AT JEFFERSON COLLEGE.—Dr. Theophilus Parvin, of Indianapolis, who for some years has been a member of the faculty of the University of Louisville, has been elected Professor of Obstetrics and Diseases of Women and Children in the Jefferson Medical College of Philadelphia, succeeding Dr. Ellerslie Wallace. We congratulate Jefferson College on the acquisition of Dr. Parvin, who has long been favorably known as an obstetrician.

THE MEDICAL DEPARTMENT OF YALE COLLEGE.—At a meeting of the Corporation of Yale College, held June 27th, Dr. Thomas H. Russell, of New Haven, was appointed a professor in the Medical Department. It is the privilege of the Medical Faculty to designate the chair to which each professor is assigned. Professor Russell will, by vote of his colleagues, occupy the chair of *Materia Medica* and Therapeutics, which was made vacant by the transfer of Professor C. A. Lindsley to the chair of Theory and Practice, the latter having been vacated by the death of Professor Wilcox.

THE COLLEGE OF PHYSICIANS AND SURGEONS OF BUFFALO.—An injunction has been issued forbidding this concern to issue certificates or diplomas as a legally incorporated medical college, the legality of its incorporation being now before the courts.

THE KENTUCKY SCHOOL OF MEDICINE.—At the twenty-eighth annual commencement, held June 26th, the degree of doctor in medicine was conferred on fifty-one gentlemen.

THE ALUMNI ASSOCIATION OF TRINITY COLLEGE.—Dr. W. A. M. Wainwright, of Hartford, has been elected president of the association.

THE COLLEGE OF MIDWIFERY.—At the close of its first session, the College of Midwifery, designed for the education of midwives, recently granted diplomas to the following-named pupils: Katie E. Vanderbilt, Marie Mount, Annetta Meyer, Katherine Mergel, Bridget A. Mullady, Rosina Stuhlfauth, Theresa Hall. Out of a class of nine, two failed to pass the examination. The lady whose name heads the list is said to have passed in a manner that would have been creditable to any medical student.

THE ASSOCIATION OF ASYLUM SUPERINTENDENTS.—At the recent meeting of the Association of Medical Superintendents of American Institutions for the Insane, held at Newport, Dr. John P. Gray, of Utica, N. Y., was elected president, and Dr. Pliny Earle, of Northampton, Mass., vice-president.

THE HARVARD ODONTOLOGICAL SOCIETY.—At the recent annual meeting the following-named gentlemen were elected officers: Dr. J. G. W. Werner, president; Dr. A. J. Colgan, secretary; Dr. W. E. Page, treasurer—all of Boston.

MEDICAL EXAMINERS IN CONNECTICUT.—The following appointments under the new law are announced: Avon, Dr. George R. Roberts; Berlin, Dr. E. H. Meade; Bloomfield, Dr. Henry Gray; Bristol, Dr. George S. Hull; Burlington, Dr. George R. Roberts; Canton, Dr. George F. Lewis; East Granby, Dr. G. W. Edwards; East Hartford, Dr. E. J. McKnight; East Windsor, Dr. H. C. Allen; Enfield, Dr. Edward F. Parsons; Farmington, Dr. Charles Carrington; Glastonbury, Dr. H. C. Bunce; Granby, Dr. G. W. Edwards; Hartland, Dr. G. W. Edwards; Hartford, Dr. H. S. Fuller; Manchester, Dr. J. N. Parker; Marlborough, Dr. N. C. Bunce; New Britain, Dr. B. N. Comings; Newington, Dr. Eli Warner; Plainville, Dr. T. G. Wright; Rocky Hill, Dr. Rufus W. Griswold; Simsbury, Dr. C. W. Wooster; Southington, Dr. W. G. Stedman; South Wind-

sor, Dr. William Wood; Suffield, Dr. J. K. Mason; West Hartford, Dr. Frederick S. Smith; Wethersfield, Dr. Abner S. Warner; Windsor, Dr. N. S. Bell; Windsor Locks, Dr. S. R. Burnap.

HONORARY DEGREES.—Yale College has conferred the honorary degree of M. A. on Dr. Henry B. Sands, of New York. Dr. Horatio C. Wood, of Philadelphia, has received the honorary degree of LL. D. from Lafayette College.

DR. HENRY J. BIGELOW, of Boston, has been elected a Foreign Honorary Fellow of the Royal Medical and Chirurgical Society, of London.

DR. JOHN SWINBURNE has been inaugurated Mayor of Albany, having successfully contested the election of Mr. Nolan.

THE PHILADELPHIA ABORTIONIST.—The man Hathaway, concerning whose career of crime we informed our readers last week, has been found guilty of the charge made against him, and has been sentenced to seven years' imprisonment, and to pay a fine of five hundred dollars and the costs of prosecution.

ABORTION-MONGERS UNDER ARREST.—Elgernon H. Wilcox and Augustus L. Meyers, said to be members of a firm manufacturing medicines for the purpose of producing abortion, doing business in Philadelphia, were arrested in that city last week, charged with using the mails for circulating their wares. The arrests were made by the United States Postal Inspectors.

PLEURO-PNEUMONIA having been reported as alarmingly prevalent among milch cows on Staten Island of late, the State Board of Health has called the attention of the National Cattle-Plague Commission to the subject.

THE NEW JERSEY TOBACCO LAW.—On the first of this month the new law of the State of New Jersey, prohibiting the sale of tobacco in any form to persons under sixteen years of age, went into effect.

FALSE VACCINATION RETURNS.—Dr. W. F. Schwartz, of Pittsburgh, Pa., has been arrested on a charge of defrauding the Board of Health by making false returns of vaccinations.

OBITUARY NOTES.

BEVERLEY LIVINGSTON, M. D.—We are pained to have to record the death of this promising young physician. He died of diphtheria on Saturday of last week, at the age of thirty-one years. Dr. Livingston took his medical degree at the College of Physicians and Surgeons in 1877, and subsequently studied abroad, devoting his attention particularly to diseases of children. At the time of his death he was one of the physicians to the Nursery and Child's Hospital, and a member of the Academy of Medicine, the Pathological Society, and several other organizations.

JEFFERSON PRATT, M. D., OF HOPKINTON, MASS.—Dr. Pratt died on the 26th ult., aged eighty years. He was the son of an officer in the army of the Revolution. For more than fifty years he practiced medicine in Hopkinton, and was a Representative in the State Legislature from 1839 to 1841. He was a member of the Massachusetts Medical Society, in which he took an active interest. He received his degree in medicine from the Berkshire Medical School.

ASA DANFORTH, M. D., OF NORWAY, ME.—Dr. Danforth died on the 16th ult., aged eighty-eight years. He was a native of Massachusetts, and received his medical education at Dartmouth College. He had been a member of the State Legislature, and was much esteemed.

W. E. SCOTT, M. D., OF MONTREAL.—Dr. Scott, for several years past the Professor of Anatomy in McGill College, died recently. He was a native of London, England, but emigrated to Canada early in life.

Proceedings of Societies.

NEW YORK OBSTETRICAL SOCIETY.

A STATED meeting was held March 20, 1883, Dr. C. C. LEE, President, in the chair.

ONE OF THE DANGERS AFTER TRACHEOTOMY.—Dr. E. L. PARTRIDGE related a case illustrating the occasional danger of removing the tracheal tube after tracheotomy. [See p. 9.]

Dr. H. T. HANKS remarked that it had always seemed to him injudicious to remove the tube on the first, second, or third day, unless there was an absolute necessity for doing so. In the most unpromising case in which he had performed tracheotomy the tube was allowed to remain for six days, when it was removed, only to be replaced on the seventh. The child recovered.

The PRESIDENT asked Dr. Partridge what proportion of patients at the Nursery and Child's Hospital recovered after tracheotomy in diphtheria.

Dr. PARTRIDGE replied that there had been very few cases of diphtheria in the institution since his connection with it. He remembered but two in which the operation had been performed during the past two years, and in both of those the patients died.

Dr. A. JACOBI said that many years ago he performed tracheotomy on a child three or four years of age, suffering from diphtheria, and the breathing ceased almost completely immediately after the introduction of the tube. Upon withdrawing the tube, the child began to breathe again, but ceased entirely after the second introduction of the tube, and died. Post-mortem examination showed the thickened membrane doubled upon itself, and pushed back against the posterior wall of the trachea. It was evident that the child had been strangled on account of failure to cut through the false membrane after division of the tracheal wall. He knew of other cases in which the same accident had occurred, although not in his own practice, as one such lesson was sufficient. With regard to the President's question as to what proportion of patients with diphtheria recovered after tracheotomy, it involved a second question, namely, What was diphtheria? which he believed it was not the President's intention to have discussed on the present occasion.

The PRESIDENT related the following case, illustrative of one of the difficulties belonging to tracheotomy: This operation was performed at the Foundling Asylum, by Dr. O'Dwyer, on a boy aged two years and a half, believed to have diphtheria. As long as the tube was allowed to remain *in situ* the child breathed freely and did well, but, every time it was removed, breathing became embarrassed and suffocation was threatened. Dr. Wagner, and afterward Dr. Lefferts, made a laryngoscopic examination, and found a small polypus within the larynx far above the artificial opening, which, during the boy's efforts at respiration, after removal of the tube, became congested and enlarged, occluding the passage. The exact origin of the neoplasm could not be determined without the use of an anæsthetic, but it was known to be far above the edge of the tracheal wound.

Dr. JACOBI remarked that if the origin of the neoplasm to which the President referred had been just at the upper edge of the tracheotomy wound, it would have been a condition not of uncommon occurrence. On the contrary, he looked upon it as almost a necessity under the circumstances. Granulations would spring up in every wound, particularly at the upper edge of the tracheal wound after tracheotomy, where no pressure whatever was produced by the tube, as occurred at the lower angle of the wound. Formerly he had been in the habit of

leaving the tube in without examination for a week or ten days, and he then found on removing it that there was severe orthopnea or dyspnea caused by granulations that had sprung up from the upper edge of the wound, which, on removing the tube, occluded the lumen of the trachea. These could sometimes be seen hanging down through the fenestra of the outer tube after removal of the inner one, and were often detached by slight manipulation. If not interfered with, they were liable after a time to complicate the case seriously. He had, therefore, made it a rule to begin cauterization of the upper edge of the wound with the solid nitrate of silver about the fourth day after the operation, neutralizing the application immediately afterward. These growths were usually sessile, although they might become pedunculated.

The PRESIDENT remarked that the peculiarity of the case to which he had referred was the fact that the attachment of the polypus was at least so far above the edge of the wound that its insertion could not be seen.

THE PORRO-MÜLLER OPERATION.—Dr. B. F. DAWSON presented the vaginal portion of the uterus, with its appendages, which had recently been removed post mortem from the noted dwarf, Mrs. Burnell, upon whom the Porro-Müller operation had been performed by Dr. Richardson, of Philadelphia, in 1880. A pathological report by Dr. Satterthwaite accompanied the specimen.

PROBABLE CEREBRAL ATROPHY IN AN INFANT.—Dr. DAWSON also presented a specimen, for the history of which he was indebted to Dr. Swift, House Physician to the New York Foundling Asylum. The child was a year and nine months old at the time of death, and had been left at the asylum when six hours old. In March, 1882, it was sent out in good condition, except that it showed weakness in the legs. November 1st there was fever, with cough; December 27th the anterior fontanelle was observed to be closed, the fingers were flexed, the thumbs lying on the palm, and the legs were rigid, and were straightened with difficulty; the spine was flexible; there was no sign of hip disease. The child was returned to the asylum at the beginning of March, 1883, and came under his care. It was poorly nourished, and appeared no more developed than a healthy child six months old. The thumbs were clinched, the fingers were held tense and half extended, and the forearms were flexed. Nothing special was noticed about the lower extremities. The pupils were normal, the tongue was thickly coated, the bowels were free, and there was no elevation of temperature. On the 2d of March it was noted that there appeared to be constant general tonic spasm; the temperature was 101° F., and there was some evidence of pulmonary trouble on the left side. March 3d the temperature was between 101° and 102° F.; there was cough, but nothing more was observed. The child died quietly, March 4th, apparently of exhaustion. At the autopsy, which was made on the 5th of March, by Dr. Northrop, the pathologist of the asylum, the body was found to be emaciated. There was only one tooth; the thumbs and the forearms were flexed. Examination of the brain showed on the convexity of the left side a cheesy nodule of the size of a pea; there was an atrophic condition of the middle third of each hemisphere. The veins were dilated. The spinal cord was apparently normal. The bronchial glands were large and cheesy, and the lungs sprinkled with tubercles. There was no consolidation. The heart was normal. The liver was fatty, enlarged, and tuberculous, and its cut surface showed a cavity of the size of a pea. The spleen contained large, cheesy tubercles. The kidneys appeared to be normal. There was ulceration of Peyer's patches. The pathologist considered the specimen unique with regard to the cerebral lesion.

Dr. HANKS reported further on the case of accidental punc-

ture of the gravid uterus during the performance of ovariectomy, related by the President at the meeting of November 21, 1882. The patient had been sent home at about the end of the fifth week after the operation, no symptoms of misecarriage having been manifest. But about the third day after her return home she began to complain of pain, and a bloody discharge appeared at the vulvar outlet. At the end of thirty-six hours the patient was rapidly becoming exsanguinated, notwithstanding vigorous attempts had been made to check the hemorrhage; the os externum was dilating, and, with the assistance of Dr. H. C. Coe, the patient was anesthetized, the os was more completely dilated with the egg-shaped, hard-rubber dilators, traction was made upon the child's feet, and the decomposing body, becoming separated from the head, was extracted alone. Various means for extracting the head were then resorted to, but in vain; and, as hemorrhage had ceased, and as the patient was much exhausted, stimulants, ergot, and anodynes were administered, and she was allowed to rest until the next day, when the head was expelled without assistance, and she made a perfect recovery.

The PRESIDENT, who had performed the ovariectomy in which the accident referred to had taken place, said that the case went to show the possibility, with our present knowledge of antiseptic methods, of the patient's complete recovery, and even a chance of her going on to full term. He therefore thought that Sir Spencer Wells's advice—to perform Cesarean section at once in these cases, since the patient would almost certainly die when the gravid uterus was punctured—in the light of our present knowledge, should not be accepted.

PROLONGED INTRA-UTERINE GESTATION.—Dr. W. M. CHAMBERLAIN stated that three years ago he reported to the society the case of a young, healthy woman whose menstrual interval was regularly twenty-eight days, who menstruated last on the 3d of June, and was delivered on the 6th of the following May, making the duration of intra-uterine gestation eleven months and three days. This patient was pregnant at the present time with her fourth child, menstruation having ceased on the 23d of May, 1882. The duration of intra-uterine gestation, therefore, had already reached ten months minus three days. The occurrence of these circumstances twice in the same patient, he thought, established beyond doubt the fact that intra-uterine gestation sometimes continued beyond the ordinary term of nine months. He asked if it had ever been considered necessary in these cases to induce labor.

Dr. F. P. FOSTER remarked that, if the opinion that labor should be induced had ever been entertained, he supposed it had been based on the supposition that the child continued to grow after the ninth month, and was therefore liable to give rise to difficulty at the time of labor. Dr. Rodenstein, however, in a paper read before the society about a year ago, had expressed the view that the child, having arrived at the degree of growth incident to term, did not continue to increase in size. He asked Dr. Chamberlain if in his case the first child was of unusual size.

Dr. CHAMBERLAIN replied that it was not, and that delivery was normal, labor being of only three hours' duration. The epidermis, the nails, and the powers of co-ordination, at the time of birth, however, seemed like those of a child over a week old.

Dr. A. S. CLARKE referred to the case of a woman, married the second time, who had ceased to menstruate in November, spent the winter in Florida, returned May 1st, and in the following September consulted him, saying that she had felt signs of life on the fourteenth of that month, although she could not believe that she was pregnant. On examination, Dr. Clarke found her pregnant, and his opinion was confirmed by Dr. Skene, and also, in October, by Dr. Thomas, who stated that the

size of the fetal head and other signs pointed to pregnancy of full five months' duration. The woman was delivered on the 19th of March of the following year, making the term of pregnancy ten months and a half. Dr. Thomas and others who examined the patient had either mistaken a fetus of three months for one of five months, or else, as Dr. Clarke believed was true the case was one of prolonged gestation.

The PRESIDENT remarked that so many elements of uncertainty entered into nearly all cases which had been reported as cases of prolonged gestation that they fell far short of positively settling the question under dispute—namely, whether intra-uterine gestation ever continued beyond the normal period of nine months; and it was a pretty safe rule to reject all cases as evidence except those in which it could be proved that but a single exposure to conception had taken place. The circumstantial evidence in Dr. Chamberlain's case, however, was stronger than usual.

EXPLORATORY LAPAROTOMY THREE YEARS AFTER BATTEY'S OPERATION.—Dr. DAWSON said that three years ago he related before the society a case in which severe ovarian and pelvic neuralgia was completely relieved by the removal of both ovaries, which were afterward found to be diseased. The Fallopian tubes were allowed to remain. Relief continued for two years; the woman went about her work in the enjoyment of good health. A year ago, however, she began to suffer again from pelvic neuralgia. And during the last few months the pain had become continuous, was exceedingly severe, and was growing worse, so that the patient had become clamorous for an operation, even at the risk of her life. From the fact that the pain was localized in the neighborhood of the Fallopian tube on the right side, and because it was believed that thickening of the tube could be detected, he decided, after consulting with Dr. C. C. Lee and Dr. J. B. Hunter, to make an exploratory incision, and, if the suspicions proved well grounded, to remove the diseased tubes; and for this purpose she was admitted into the Woman's Hospital. Before proceeding with the operation a more careful examination was made while the patient was under the influence of ether, and it was not possible to recognize that there was enlargement of the tubes. He proceeded to make the exploratory incision through the scar of the wound made at the previous operation. The patient had had more or less peritonitis, and adhesions were found to be so extensive that it was almost impossible to recognize the tubes at all; but they were found to be in a condition of atrophy. Without further interference, the abdominal wound was closed, and the patient did well. He asked what the prospects of relief were in such a case. The pain was so severe that the patient had again had to resort to the use of opiates, which must in time undermine her health. Other treatment gave no relief.

Dr. HANKS asked whether the amount of chronic cellulitis and peritonitis from which the patient had suffered, and was still suffering, was not sufficient to account for her present pain.

Dr. DAWSON remarked that the pain was so circumscribed, and pointed so unequivocally to the region of the tube as its seat, which was also exceedingly sensitive to pressure, that it was inferred that the origin of the trouble was in that organ.

HENRY J. GARRIGUES, M. D.,

B. F. DAWSON, M. D.,

FRANK P. FOSTER, M. D., *ex officio*,

Committee on Publication.

THE AMERICAN DERMATOLOGICAL ASSOCIATION.—The seventh annual meeting will be held at Lake George August 29th, 30th, and 31st.

THE THIRD INTERNATIONAL OTOLOGICAL CONGRESS, says the "Medical Times and Gazette," will be held at Basle during the first week of September, 1884.

COLLEGE OF PHYSICIANS OF PHILADELPHIA.

*Meeting of March 1, 1883.**(Concluded from Volume XXXVII., page 720.)*

An important point in the history of typhoid fever, as it occurred in the country, was, that if the disease once appeared in a farm-house, it would, as a rule, attack more than one of the members of the family before leaving it, and this, too, when the physician knew of no other case within a mile or more of the afflicted family. Now, this is in entire accord with the admitted contagiousness, under certain conditions, of typhoid fever, not only by Trousseau, but by a majority of the most distinguished writers, among them that pre-eminent author and teacher, Austin Flint, Sr. The feature just noticed does not, as a rule, occur in the city, for in an immense majority of cases there will be but one member of a family attacked. Now, it has been said by a somewhat noted medical statistician, and concurred in by many others, that if a case of typhoid fever appears in a family it proves the existence of gas or filth in immediate relation with the residence. This is certainly explicit; but the question is, How happens it that, with such an efficient cause for the first case, it is only occasionally followed by others in the family? But, again, it may be asked if sewer gas—for this, after all, appears to be the great "*cheval de bataille*"—has not been, and is not yet excluded, by even the best plumbing, from the finest houses in this city or in New York? and, consequently, that tens of thousands of houses in both cities are in this fearfully exposed condition, how comes it that in Philadelphia, with nine hundred thousand inhabitants, the Board of Health has recently reported but two deaths from typhoid fever in one week, and four in another, while diphtheria, said to be due to the same agencies, has prevailed at the same time to an alarming extent? The returns of the Board of Health of New York present similar statistics, showing comparatively fewer deaths from typhoid fever than Philadelphia, but a larger proportionate fatality from diphtheria and scarlet fever. That many physicians neglect to carefully examine these reports is well known, and yet they are the only available and reliable sources of information in regard to the character and movement of disease. If, instead of this reprehensible neglect, a diligent and discriminating examination were regularly made, it would do much to prevent misconception and error in regard to the actual causation of disease—a subject admitted by the most experienced and gifted minds to be one of equal difficulty and importance.

In this connection it must be stated that the reports of the Board of Health of Philadelphia show unmistakably that in the central portions of the city, where sewers and water-closets are most numerous, there is, as a rule, less typhoid fever and diphtheria than upon the outskirts, adjacent to the country; and this was the fact in regard to bilious remittent fever before it gave place to typhoid. Neither is it matter of surprise, for, just in proportion as the streets have been extended into the suburbs, graded and paved, houses erected thereon, and sewers constructed to carry off the surface drainage, a diminution of fever, whether intermittent, remittent, or typhoid, has been the beneficial result of such improvements. In support of this view we have the testimony of the late Dr. J. K. Mitchell, the distinguished and brilliant Professor of the Theory and Practice of Medicine in Jefferson Medical College, as follows: In December of the year 1850 he was called to consult with the late Dr. Gebhard and the writer in a fatal case of typhoid fever, in a house on Sixteenth above Summer Street—at that remote period an outskirt of the city. On his first visit the doctor informed us that he was scarcely ever called upon to visit a patient affected with typhoid fever in a large circle of practice in

his own section of the city, but that nearly all such cases were, like the present one, in the suburbs, and in consultation. Now, the important fact in this connection is, that in his own central position sewers, water-closets, and the usual well in the yard, were almost everywhere, while in the suburbs they were comparatively few in number, the water-closet exceptionally rare. Does it not seem singular, then, that, despite the improved, the scientific, the sanitary plumbing of the present day, "nine houses out of ten on Fifth Avenue, New York, are not safe to live in"; and that all the actual appliances for the exclusion of sewer gas should be torn out, and others of an effective character be constructed in a separate building or annex? Dr. Mitchell also made allusion to the greater prevalence and fatality of fever in the country, as related to him by students from different sections of the United States.

In the paper by the writer upon this subject before the College of Physicians of Philadelphia, in 1879, Mr. Henry Dupont, in reply to a note, stated that his impression was that, in the years 1840, '41, '42, '43, there were but few cases of typhoid fever among the thousands of operatives and their families on the Brandywine, and this impression was corroborated by a note from Dr. Joseph P. Chandler, a practitioner of that section, in which he said that, while a very few cases *seemed* to owe their origin to local causes, his experience was perfectly in accord with that of the writer—that the disease nearly always showed itself in the houses of the farmers, and that, no matter how well situated upon an eminence, with drainage in all directions from the residence, this did not secure them from attack. This is but a confirmation of the views long ago expressed by Dr. James Jackson, of Boston, and Dr. Nathan Smith, whose opportunities for observing the origin, development, and progress of the disease were exceptionally abundant. In a note sent to me a few days after the reading of the paper just alluded to, the writer declared that nothing was more erroneous than the current and popular opinions in regard to the causes of typhoid fever, and, in proof of this, cited the condition of the streets of one or two of the most populous and commercial cities of Africa, abounding, as they did, with every conceivable species of filth, emitting a stench nauseous to the last degree, and yet typhoid fever prevailed to a very slight extent. This statement is in accord with one quoted by Professor Hamilton in his paper, before alluded to, to this effect: that in Canton, filthy beyond measure, typhoid fever and diphtheria are almost unknown.

In further support of these views, a physician of New England has informed the writer that a few years ago he addressed letters to about fifty practitioners, in different parts of the State in which he practiced, asking their experience in reference to outbreaks of typhoid. The answers, with very few exceptions, were, that the rural sections suffered the most, whether in regard to proportionate number of cases or fatality. Thus it now appears, as it did in the time of Nathan Smith and James Jackson, that typhoid fever outbreaks occurred without the possibility of referring them to the conjectural local agencies now in favor. Physicians who have not enjoyed sufficient opportunities to observe the origin and progress of typhoid fever, and sanitarians, without medical experience, are the most positive in opinion in regard to the primary causes of typhoid fever; while Trousseau, Flint, Sr., Murchison, and many others of similar experience and sagacity, freely admit the obscurity of this subject, and the difficulty of determining the influence of local agencies in the production of typhoid fever as compared with causes of a general character, over which we have no control, as in telluric or atmospheric conditions, involving thermometric, hygrometric, and electric states and their influence, singly or combined.

As pertinent to this point, reference may here be made to an article in the "Medical and Surgical Reporter" for January 1,

1881, entitled "The Limited Effects of Sanitation," from the pen of Dr. John Syer Bristowe, President of the Society of Medical Officers of Health, as follows: "If we look to the remarkable influence which simple variations of temperature and peculiarities of season exert on the mortuary returns, in respect both of the number of deaths and the character of the fatal diseases, and compare therewith the comparatively small effect on the death-rate of even one of the most fatal of the zymotic diseases, or with the insignificant influence of deaths from enteric fever, diphtheria, pyæmia, puerperal fever, and other affections over which sanitary science is supposed to exert a specially valuable influence, we can scarcely avoid, I think, seeing that, on similar grounds, the deaths saved directly by the sanitary labors on which we are engaged must, under any circumstances, be so few annually as to produce no distinct and unmistakable effect on the mortuary rates." This sincere and ingenuous avowal of opinion by one so distinguished as an authority in medical science is well entitled to the serious consideration of the enthusiasts who never tire in predicting the suppression of the diseases in question so soon as sewer gas and filth are banished from the houses and premises of our citizens; while it is a notorious fact that lavish expenditures of money, by public authority and by citizens, have for several years past been made in Philadelphia without any perceptibly important result as the consequence. In the paper of Professor Hamilton it is distinctly stated that during a certain period, the increased mortality in New York could not be found in the condition of the streets, for at that time they were unusually clean; nor can the unusually severe outbreak of diphtheria now prevailing in our own city be attributed to the current local agencies. If, indeed, the primary causes of typhoid fever, diphtheria, and scarlet fever in cities be due to the influence of sewer gas and filth, then, in fact, our citizens can have little hope of an early exemption from these maladies. Yet on this score there is no occasion to despond. Fifty years ago typhoid fever was not common, but intermittent and bilious-remittent prevailed in the city, yet only to a moderate degree compared to the suburbs and the adjacent country. These are not regarded as special filth diseases, while typhoid fever, diphtheria, and scarlet fever are by many so considered. At the remote period alluded to, some attention was given to cleansing the streets, but there were no such exertions and expenditure of money, even in proportion to the size and population of the city, as are now customary; and as to inspection of dwellings, out-houses, wells, and the premises, it was almost unknown. That constant attention, by the authorities and citizens should be given to maintain cleanliness in every place, and by all possible means, no one will deny; but, when all this has been done, what comparison can there be between the condition of a large city and any well-managed rural section in this point of view? Under the most favorable circumstances, the sources of filth contamination in a city are as ten to one compared with the country, and this is manifest in the single fact that the ground on which a city rests is, of necessity, well-nigh riddled with wells for the convenience of families.

During the past ten or twelve years the average weekly deaths from typhoid fever in this city have been from seven to eight, as before stated. If this disease had prevailed here, in frequency of attacks and fatality, in proportion to population, as the writer has known it to do in the country, forty to fifty deaths per week would have probably occurred. The same feeling of gratification that the late Dr. Joseph Parrish manifested and expressed when informing his class of the slight mortality from bilious fever in this city, as compared with the country, has been experienced by the writer in regard to typhoid fever in this city as compared with what is seen from time to time in the country. The city of Philadelphia, as shown by the reports of

the Board of Health, still maintains its title as one of the healthiest of the large cities of the world; nor is it good policy, under any circumstances, to do or say aught to inspire citizens with dread, and induce strangers, who may have occasion to visit us on business, or otherwise, to regard Philadelphia as unhealthy, and therefore to be avoided.

[After the reading of the preceding paper:]

Colonel WARING, who was present by invitation, was called upon by the chair to discuss the subject considered in the paper. He remarked that he desired to say one word for sanitary engineers with regard to the cause of typhoid fever, and this was that they had long since abandoned the opinion that sewer gas was the cause of the disease. He thought it very important that filth should be gotten out of the way so as not to become a source of contamination to the water-supply. The literature of the subject seems to prove that typhoid fever in the country is due to drinking-water which has become contaminated. Cleanliness is safe and important, and efforts should be always made to secure it.

Dr. HAMILTON said the quality of the drinking-water remained essentially the same from year to year, whether typhoid fever prevailed extensively or was absent; so, also, in regard to vegetables and roots for family use. These are laid up every season, generally in trenches, covered with clean straw, and earthed over. On consulting several German monographs, Dr. Hamilton had found the experience of the writers to conform with his own—that males suffered more from typhoid fever than females, and that from the fifteenth to the twenty-first year, the period of rapid growth, the danger, in case of an attack, was augmented.

Dr. J. M. KEATING said that the elaborate paper we have just heard read might mislead some of its hearers into the supposition that *sewer gas* was considered a cause of typhoid fever. It may be well for us at once to dispel such an idea, and to couple with the paper just heard the emphatic indorsement of this body that *sewer gas*, as far as *typhoid fever* is concerned, is simply a vehicle by which the specific germ may enter the system of one prepared to nourish and develop it. There is no need to debate the question as to the greater importance of infected drinking-water; the incidents in the paper just heard, the greater prevalence of the disease in the rural districts where privy wells contaminate the drinking-water, and the remarkable statistics of the New England country towns, where the wells for sewage and drinking purposes are under one roof, the fact that these localized epidemics are usually traceable to one primary case entering the village, are all sufficient in themselves.

But though *sewer gas* may not always carry the germs of typhoid fever, it has a poison of its own equally terrible in its consequences.

The modern improvements in house-drainage—indescribable comforts where properly constructed—are, unfortunately, too often the means of carrying the most deadly vapors directly into the abodes of luxury and wealth. At these hours, when depressing influences have disarmed their victim, these noxious gases steal insidiously into his chamber and do such violence as to render fatal, by the most serious complications, such diseases as are otherwise mild and harmless in themselves. Whether the concentrated miasm from palatial emanations or the outpouring gases from a sewer through siphoned traps, the unconscious sleeper breathes poisons as potent in their devitalizing effects as if he inhaled the germs of typhoid fever in their purity or drank water impregnated with the excreta of typhoid cases. *Sewer gas* is not necessarily a cause of typhoid fever, except when it carries its germ, but it is the most potent cause of the "typhoid state"; and there is a decided choice between these two evils—in favor of the former.

Early manhood carries with it a decided predisposition to typhoid fever. I have recently read with great interest an article in the "Nineteenth Century," by General Sir Frederick Roberts, on the recruits for foreign service in the English army, in which statistics were given to show that the large mortality from typhoid fever in young recruits rendered advisable the considerations as to whether it was not better for foreign service to take only such as had recruited early and survived this period, or to recruit only from those who had passed the age when the disease was most liable.

The typhoid germ is certainly more deadly if its vehicle be poisonous also; and it becomes our duty to add an earnest appeal to that which seeks by proper legislation to give us pure air for our children to breathe, and pure, uncontaminated water to drink.

Dr. J. G. RICHARDSON remarked: I am well aware that the evening is too far advanced for me to attempt to discuss the important subject of Dr. Hamilton's paper, and I will, therefore, content myself with suggesting how two of Dr. Hamilton's illustrative cases may be very plausibly explained in accordance with the modern views respecting the danger to human health from impure drinking-water, foul sewer air, and other grave sanitary errors.

Dr. Hamilton mentioned the case of the mother of a family who contracted typhoid fever away from home, and brought it back to her farm-house, where several members of the family seemed to take the disease from her, and argued that this circumstance proved that the infection of typhoid fever was not carried by sewer gas, because in this instance no sewers existed near the place. The true explanation of this seeming anomaly is, I believe, however, that, while typhoid fever is sometimes carried by sewer gas, it is more frequently conveyed in drinking-water contaminated by sewage, and that in this case the diarrhoeal discharges of the mother were emptied near enough to the family well to soak through the ground into it, and, by polluting the drinking fluid, transmit the disease to other members of the household.

That some such mode of propagation may have existed is shown by a remarkable fact related by Professor Flint, upon whom Dr. Hamilton relies as an authority against the dangers of sewer gas, which is briefly as follows: A young man, traveling by stage-coach in Vermont, was taken sick, and left at a wayside inn in a small village. His complaint soon proved to be typhoid fever, and in a short time the disease appeared in each of the neighboring houses, the inhabitants of which used water from the tavern-keeper's well, *except one*, whose residents had quarreled with the landlord, and, consequently, went elsewhere for their water-supply.

In the light of recent sanitary science, then, it appears that many people, many whole families, in rural districts, suffer from typhoid fever because they drink well-water polluted by direct mixture with faecal matter containing the specific fever germ, which soaks through the soil, often directly, into the well; while in cities a few persons, relatively, are attacked with typhoid fever, and many with diphtheria, etc., by inhaling poisoned sewer air from stationary wash-stands and other modern conveniences. There are, probably, one hundred thousand village- and farm-houses in the United States to-day where the cess-pools *feed* the wells in this abominable manner, and such wells surely in their turn *feed*, from time to time, the church-yards in their neighborhood.

Again, Dr. Hamilton inquires, Why is it, if sewer gas is the cause of both typhoid fever and diphtheria, we now have, according to the late reports of the Board of Health, only two or three deaths per week from the former disease, and thirty or forty from the latter? The obvious answer is that sewer gas

can only convey the *materies morbi* (the disease germ, as I believe it is) with which it is freighted, and at the present time sewer air in but few houses is contaminated with typhoid-fever poison, while in many it is loaded with diphtheria germs. Precisely as drinking-water might contain both lead and copper in varying proportions, and, accordingly as one or the other temporarily predominated, would persons who imbibed the fluid be liable to exhibit the symptoms of lead palsy or of copper poisoning.

Although I am not yet prepared to indorse the *dictum* of a late English hygienist, who declares, "For every death from typhoid fever, somebody" (meaning some plumber, architect, or sanitary engineer) "ought to be *hung*," I do hope and believe that the time is not far distant when at least the charge of criminal negligence will lie at the door of every physician who, after being warned of the occurrence of one case of typhoid fever, diphtheria, etc., in a dwelling, does not immediately endeavor to guard the other residents of that house against the germs (or poison, if you choose) of infectious disease, by a diligent search for the sanitary defects in the water or milk supply, or in the disposal of sewage, which will almost certainly be discovered.

I have spoken of the germs of typhoid, diphtheria, etc., entering sleeping apartments from stationary wash-stands in spite of traps, and in this connection I desire to show the Fellows of the college just how, as I conceive, these poisons may penetrate through such mechanical contrivances. Here I exhibit the ball of an ordinary Bower trap, covered with a coat of fungous growth, and here a portion of the slimy coating from one of the pipes of similar structure. Since these form a continuous lining quite through the trap, it is obvious, I think, that it may have crept up from the sewer itself, thus forming on the inner or house side of the trap a new starting-point for the evolution of disease germs, against which, of course, the most perfect water seal is absolutely no protection. This, I believe, is what really occurs in a multitude of instances, as I pointed out in a paper entitled "Why Sewer Traps are Unreliable" in the "Medical News" for September 2, 1882. The true remedy for the dangers of sewer-gas poisoning is, therefore, I think, as explained in that article, to be found in sterilizing the whole interior of our traps and waste-pipes with slow currents or drippings of powerful disinfectants, such as the salts of iron, zinc, mercury, or arsenic, "just as the shores of the Dead Sea and the banks of certain small streams are sterilized, by mineral ingredients or poisonous metallic substances from manufacturing refuse, with which their waters are mingled."

Reports on the Progress of Medicine.

OPHTHALMOLOGY AND OTOTOLOGY.

By CHARLES STEDMAN BULL, M. D.,

LECTURER ON OPHTHALMOLOGY AND OTOTOLOGY IN THE BELLEVUE HOSPITAL MEDICAL COLLEGE; SURGEON TO THE NEW YORK EYE AND EAR INFIRMARY; OPHTHALMIC SURGEON TO ST. MARY'S FREE HOSPITAL FOR CHILDREN, AND TO THE NURSERY AND CHILD'S HOSPITAL.

OPHTHALMOLOGY.

UPON THE COURSE OF THE NERVE FIBERS IN THE BRAIN WHICH PRESIDE OVER THE CONTRACTION OF THE PUPIL, AND THE LOCALIZATION OF A CENTER FOR THE IRIS AND FOR THE CONTRACTION OF THE OCULAR MUSCLES.—Bechterew ("Archiv. für die gesammte Physiologie," xxxi, 1 and 2) thus formulates his conclusions derived from investigations into the above subject: 1. No reflex

fibers which preside over the contraction of the pupil are to be found either in the optic tracts or in the central terminations in the corpora geniculata and corpora quadrigemina of the higher animals, or in the corpora bigemina of birds. 2. While these fibers begin in the retina and run in the optic nerve, they enter behind the chiasm directly into the central gray matter surrounding the cavity of the third ventricle, and run toward the nuclei of the oculomotor nerves, whence they again return toward the periphery in the trunk of these nerves. 3. Throughout their entire course in the central gray substance these fibers presiding over the contraction of the pupil are uncrossed. 4. Each eye possesses an independent reflex curve or band, which runs through the optic nerve, the corresponding half of the central gray substance, the nucleus and trunk of the oculomotorius on the same side. 5. Between the reflex bands or fibers of the two sides there is a connection, by means of which the reflex action of one eye can be carried to the other. This connection or communication is maintained by means of commissural fibers between the nuclei of the two oculomotor nerves. 6. The centers for the reflex contraction of the pupils do not lie at the bottom of the third ventricle, as Hensen and Völkers believed, nor behind the corpora quadrigemina, as Adamük thought, but they are, in all probability, located in the nuclei of the oculomotor nerves. 7. There are no centers for the contraction of the ocular muscles in the bottom of the third ventricle, at least in the sense assumed by Hensen and Völkers. 8. The changes in the position of the eyes, which, together with general disturbances of motility (disturbances of equilibration and forced movements), always appear after irritation or destruction of the region of the third ventricle, are in character exactly similar to those changes in the position of the eyes observed after destruction of the semicircular canals, or of the olivary bodies of the medulla oblongata; they merely prove that this region, like the organs just mentioned, exert an influence upon the entire sphere of motility of the animal, including the eyes. 9. The centers for the voluntary movements of the eyeball must be located in the nuclei of the nerves which innervate the ocular muscles, since static changes in the position of the eyes are only produced by destruction of these nuclei, or of the roots proceeding from them. 10. The localization of a center for accommodation in the region of the floor of the third ventricle can not yet be regarded as finally settled. 11. The dilating effect on the pupil of painful irritation is not by means of the fibers of the sympathetic nerve, but occurs independently through stoppage or hindrance of the light reflex. 12. The so-called reflex pupillary rigidity, in all probability, is caused by such pathological processes as interrupt the path of the light-reflex in its course from the optic chiasm to the nucleus of the oculomotorius.

ON THE FREQUENCY OF PAPILLITIS IN SYMPATHETIC OPHTHALMITIS.—Benson ("Ophth. Rev.," May, 1883) reports a well-marked case of this sort in a female child, aged eight, occurring five weeks after a penetrating wound in the ciliary region of the other eye. Benson thinks that, if it be conceded that papillitis in the injured eye is followed by papillitis in the sympathizing eye, its occurrence should be very constant, for it is hardly possible that an eye so injured as to produce sympathetic inflammation in the fellow-eye could escape being itself the subject of papillitis, since the disc shows signs of inflammation (microscopic, if not ophthalmoscopic) in almost all the severe inflammatory affections of the globe. Even in comparatively superficial wounds or ulcers of the cornea, and in iritis, increased haziness of the disc can very often be observed with the ophthalmoscope. The fact that a very considerable degree of papillitis may exist without producing any loss of sight or other subjective symptoms would render it very possible for such a condi-

tion to be overlooked; for not until some of the subjective or external symptoms of inflammation appeared would the patient present himself for examination. Hence, it is advisable, in all cases where sympathetic inflammation is feared, to examine systematically, and at short intervals, the papilla of each eye, and note its condition.

A CASE OF RETINITIS ALBESCENS PUNCTATA.—Burnett ("Arch. of Ophth.," xii, 1) reports a case of this nature in a woman, aged fifty-eight. The trouble began suddenly as a dark spot in the center of the visual field of the right eye. This condition remained for more than a month, and then the scotoma began to break up, and when Burnett saw her the visual field was intact and color perception normal, with vision of $\frac{4}{5}$. In the region of the macula lutea, and occupying the space between this and the optic disc, as well as somewhat below the latter, there were numerous very small, yellowish-white dots. These dots were not always round in shape, but frequently oblong, and usually had a sharply-defined outline. One of the large retinal veins below the disc was very tortuous, while a smaller one, just above it, became lost, and its place was occupied by a white band similar in appearance to the dots. The peculiarities of this affection seem to be that the alterations are confined almost exclusively to the region between the macula lutea and optic disc, and are in the retina, and most probably confined to the inner layers.

PERCEPTION OF COLORS AT THE PERIPHERY OF THE RETINA.—Charpentier ("Archives d'ophtalmologie," Jan.-Feb., 1883) has been making some investigations into the acuity of the color-sense at the periphery of the retina, and draws the following conclusions: 1. It is certain that the peripheral parts of the retina are not achromatopic; they are capable of perceiving all the colors, or, at least, the primary colors. 2. In order that the periphery of the retina may perceive colors, the latter must be very intense. The acuity of perception of colors diminishes progressively from the center to the periphery of the retina. 3. The condition of intensity is the one necessary factor, and one need not employ very large colored surfaces. 4. If the retina is not achromatopic at the periphery, it may be dyschromatopic; and it is so in the sense that it perceives the center much better than the colors; but it might be so in another sense, if it perceived certain colors more easily than others, comparatively to the center or at a point less eccentric.

A CONTRIBUTION TO THE ZONULE QUESTION.—Dessauer ("Klin. Monatsbl. für Augenheilkunde," March, 1883) considers that the subject of the origin and distribution of the zonula fibers should be reconsidered *ab initio*. To determine what the zonule is, and whence it takes its origin, we must be enabled to follow out the entire course of its fibers in preparations under the microscope. His investigations have demonstrated to his satisfaction that the fibers of the zonule never reach the ora serrata in adults, but in the new-born they approach this region somewhat more closely. Each fiber is attached to the internal limiting membrane of the pars ciliaris retinae, and beyond the ora serrata not a single zonule fiber can be followed. The zonule, both of adults and the new-born, has absolutely nothing to do with the vitreous. His final conclusions are as follows: The zonule is closely applied to the smooth portion of the ciliary body and to the ciliary processes, and, when carefully detached, presents an exact impression of these processes; it has no connection with the hyaloid membrane at any period of life; no cells or nuclei, arranged in regular order and pointing to the existence of an endothelial membrane of the zonule, have ever been demonstrated; hollow spaces probably exist between the zonule and the vitreous, but not between the zonule and the ciliary processes.

THE EFFECTS OF THE ELECTRIC LIGHT UPON THE EYE.—

Emrys-Jones ("Ophth. Rev.," April, 1883) reports two cases of severe conjunctival irritation and inflammation produced by too prolonged exposure of the unprotected eyes to the electric light. He considers that the symptoms are decidedly due to the brilliancy more than to the radiant heat of the lamp. It is easy to understand that retinal mischief may follow a too prolonged exposure without the protection of colored glasses.

THE OPERATION FOR CONGENITAL BLEPHAROPTOSIS.—Eversbusch ("Klin. Monatsbl. für Augenheilk.," March, 1883) describes the manner in which he operates for congenital blepharoptosis as follows: He introduces Snellen's blepharostat with the plate pushed as far up behind the lid as possible, and, before screwing down the half-ring, he pushes the skin as far down toward the ciliary margin as possible, so that, after closure of the spring, not only the tarsal portion of the upper lid, but also the retro-tarsal fold, is confined within the limits of the instrument. Then with a scalpel he divides the skin and the layers of orbicularis fibers the entire length of the lid parallel to the lid margin and midway between the latter and the eyebrow. He then dissects carefully the skin and subjacent muscular fibers upward and downward for an extent of about 4 millimetres free from the underlying tissue, so that the upper fold of transmission and the insertion of the levator into the tarsus can be reached and laid bare. He then passes each end of a fine suture through a fine, moderately curved needle, and introduces one of these needles through the middle of the insertion of the levator, so that the points of entrance and exit are about $2\frac{1}{2}$ millimetres from each other, and the point perforated is thus embraced in a still open loop. This needle, together with the other needle, is then introduced downward between the tarsal plate and the orbicularis, from 2 to 3 millimetres distant from each other, in such a manner that they are brought out to view exactly in the middle of the free border of the lid, and about 2 or 3 millimetres from each other. In the same way similar sutures with double needles are introduced through the temporal and nasal sections of the tendon of the levator, so that the latter is included in three loops. Before the ends of these sutures at the edge of the lid are tied, the incision in the skin and muscle is to be closed by three vertical sutures, and the blepharostat is to be removed. A protective bandage of borated cotton is to be applied, and the other eye also bandaged. This operation is practically an advancement of the levator muscle, except that the line of insertion of the tendon is not divided. Eversbusch uses carbolized catgut for sutures, and ties them at the margin of the lid over or by means of glass or mother-of-pearl beads, to prevent their cutting too deeply into the lid margin. The author recommends the operation solely for those cases in which the blepharoptosis is congenital.

ARTERIO-VEINous ANEURYSM IN THE RETINA.—Fuchs ("Arch. of Ophth.," xii, 1) reports a case, apparently of this nature, in a man, aged twenty-six, who was struck on the right eye by the branch of a tree in October, 1880. There was a small wound at the inner corner of the eye, and the eye was bloodshot for several weeks. Vision was not perceptibly diminished at first, but after six months it began to fail. In 1881 he had $V = \frac{3}{20}$, but soon after he could only count fingers at $\frac{3}{4}$ of a metre eccentrically. Externally, the right eye appeared normal, the media were clear, and the papilla and upper half of the retina were normal. Below these were two large vessels which were very conspicuous. The vein passed almost perpendicularly downward, and the artery, to the outer side of the vein at first, afterward passed over the vein and ran downward and inward. In the first half of its course there were only isolated dilations; between these it was narrower than normal. The inferior half was distinguished from the superior in that it widened suddenly. Both artery and vein disappeared in a large, some-

what ill-defined disc, which was prominent, covered with blood-spots, and very dark. Both artery and vein were of the same dark color, and could only be distinguished from one another by their branches. There was no spontaneous pulsation; a slight pressure made the large vein and a large branch of the artery pulsate. In the round tumor pulsation could not be produced. In the region of the macula lutea there was a white, star-shaped figure, similar to that of Bright's retinitis. In the direction of the continuation of the rays of the star were also white spots. On the inner side of the retina was a band-like figure, which grew narrower as it passed away from the papilla, and at the same time bent downward. It had a silvery reflex, and its color could only be compared to that of those figures which are sometimes found in the region of the macula, in *neuritis ex tumore cerebri*. The round spot in which both the large vessels ended seemed to be a spurious aneurysm. The injury must have caused a rupture of both vessels, and a consequent pouring of their blood either into or under the retina. The latter seems the more probable, since the spot was too large to be in the retina itself. The reason why there was not further extravasation of blood in the tissues was because the retina and choroid probably became adherent to each other, and thus acted as a wall of retention.

MELANOMA OF THE IRIS.—Fuchs (*ibid.*) reports a typical case of this rather rare disease in a woman, aged seventy-five, who had an incipient senile cataract. There was a blackish-brown prominence visible at the supero-nasal quadrant of the pupillary margin, 4 mm. long, which projected from the lower surface of the iris into the pupillary space. It projected above the pupillary margin about 1 mm. during contraction, and 2 mm. in dilatation of the pupil. There was evidently a larger tumor in the posterior chamber, for the iris in this region was crowded forward. The tumor and neighboring parts of the iris were excised through an incision made with a narrow Graefe's knife, and carefully examined. The iris was found very strongly pigmented, not only in the pigment cells of the stroma, but also by large numbers of free pigment granules. The proliferation directed toward the pupillary margin formed a black wedge, which almost reached the free border of the iris, and lay rather nearer the posterior than the anterior surface of the iris, and seemed to include the sphincter. A similar wedge of pigment extended into the iris in a centrifugal direction; passing obliquely forward, it reached at one point the anterior surface of the iris. The main proliferation extended backward, and a broad black band perforated the posterior limiting layer and the uveal leaf of the iris, so as to spread behind it and form the tumor observed. The tumor consisted of an accumulation of cells which were so deeply pigmented that they formed a uniform black mass. The tumor possessed neither blood-vessels nor stroma. At the central side the posterior limiting membrane of the iris was partly reflected upon the surface of the tumor. There was no trace of the uveal pigment of the iris.

PULSATING TUMOR OF THE ORBIT, FOLLOWED BY A CURE.—Gayet ("Ann. d'oculistique," Jan.-Feb., 1833) reports a case of pulsating tumor in the orbit of a shoemaker. Several days before Gayet saw the patient the latter had received a violent blow upon the right cheek from a suddenly opened door. The blow was so violent as to cause unconsciousness. For twenty-four hours he complained of nothing, but then noticed a noise in his head and a slight failure of vision. These symptoms somewhat rapidly increased, and, in addition, the right eye began to project, and he had a sort of dull, stunned feeling in his head, and diplopia. When he presented himself at the hospital there was marked exophthalmus, ptosis, vision very much reduced, but no ophthalmic evidence of any trouble. There was an intermittent systolic murmur and a visible pulsation of the eyeball,

On the third day after, there was very marked chemosis of the ocular conjunctiva and œdema of both lids, and the latter rapidly spread over the entire right half of the face and invaded the left lower eyelid. From January 24th to February 1st, digital compression of the right common carotid was maintained daily for from one to two hours. During the compression the bruit and pulsation disappeared, but reappeared on the cessation of the compression. The patient was under observation till April 9th. On February 10th, a small expansive, pulsating tumor for the first time was distinguished in the upper and inner part of the orbit, which slowly became more and more circumscribed, and the symptoms slowly subsided. On February 15th the first ophthalmoscopic signs of an exudative retinitis with hæmorrhages were discerned. On the 9th of April not a trace of the tumor remained, but there was some slight erosion of the cornea, and a small amount of convergent strabismus. The condition in the retina remained unchanged. Gayet's conclusions are as follows:

1. There was a perforation of the right internal carotid artery in its passage near the cavernous sinus, the result of a fracture of the orbit.
2. An arterio-venous aneurysm was formed.
3. There was consecutive dilatation of all the branches of the ophthalmic vein and a tendency to the formation of a venous tumor.
4. The cure was due to some fortunate coagulation, but exactly where Gayet does not undertake to say.

THE NEW METHOD OF EXTRACTION OF CATARACT WITHOUT EXCISION OF THE IRIS.—Galezowski ("Rec. d'ophtal.," Feb., 1883), in advocating this method of operating, takes occasion to review the results of the 1,020 cases operated upon during the last nine years. He concludes: 1. That the excision of the iris does not prevent the occurrence of inflammation in the extraction of cataract. 2. It is often the cause of secondary cataracts. 3. The scleral or sclero-corneal wounds are much more dangerous for the definite results of an operation than corneal wounds. In operating, he makes his puncture and counterpuncture in the sclero-corneal limit, but he makes the summit of the flap at 2 mm. from the scleral border. The wound is thus elliptical, the coaptation is easier, and the cicatrization more rapid. The pupil dilates under pressure of the lens and lets the latter through easily; the iris then returns to its own place, or, if not, it may be pushed back with a smooth stylet. The coaptation of the lips of the wound is complete in twenty-four or forty-eight hours. The results of this method of operating are relatively better than we obtain by excision of the iris.

SYMPATHETIC GLAUCOMA.—Galezowski (*ibid.*, April, 1883) reports a case of subacute sympathetic glaucoma in a man aged forty. Three years before, the patient had received a serious lesion of the right eye by a blow from a stick of wood. There was a violent inflammation, followed by loss of vision and, finally, complete atrophy of the eyeball. About three years later the patient noticed occasional attacks of diminution of vision in the left eye, with transient injection of the vessels, and at the same time the atrophied eye became injected and sensitive. Between October, 1882, and February, 1883, he had several such attacks, which were transient, and soon subsided. At the latter date he began to have severe pain in the good eye, accompanied by profuse lachrymation and periodical clouding of the vision toward evening. On examination, the atrophied eyeball showed a horizontal cicatrix across the remains of the cornea, injection of superficial and deep vessels, and sensitiveness to the touch. The left eye showed all the symptoms of a typical subacute glaucoma, with tension +1, normal vision, and marked narrowing of the visual field outward and downward. The atrophied right eye was immediately enucleated, and on the following day the pain in the left eye disappeared and did not return. The symptoms of irritation also subsided, but the increased tension remained. On the 21st of February

an iridectomy was done upward, and the wound healed by first intention. On March 11th the vision was normal, he read Sn. I, and the color perception was completely restored. The field of vision had sensibly increased in extent, though there was still a marked concentric limitation.

CROSSED AMBLYOPIA AND HEMIANOPSIA IN CEREBRAL LESIONS.—Grasset (*ibid.*, March, 1883), in taking up this subject in a short communication, reviews briefly certain published cases of this nature, thirteen in number, in the light of the scheme of explanation offered by Charcot, and of the modified one advocated by Féré. He rejects the scheme of Charcot, because, according to it, hemianopsia could only be produced by a lesion of the optic tracts. On the other hand, the scheme of Féré does not offer any explanation of the facts of crossed amblyopia. At no point of his schematic representation is there any point of union of the external and internal nerve fibers of the same eye. Having abandoned the schemes of both Charcot and Féré, he proceeds to propose a new scheme of explanation for these cases, as follows: The theory of the semi-decussation in the chiasm is not apparently contradicted by the facts: lesion of the optic tract behind the chiasm causes hemianopsia. Hence,

1. The internal fibers of the optic nerves decussate in the chiasm, while the external fibers continue straight on.
2. The external fibers decussate behind the chiasm (near the tubercula quadrigemina) in such a manner that the decussation is there complete for all the optic nerve fibers, and that in each internal capsule all the fibers coming from the opposite eye are found united.

But when the lesion exists in the cortex, as in the occipital lobe, there results bilateral hemianopsia, as in lesion of the optic tracts. To explain this, a new decussation of the external fibers of each retina would be necessary, and then each hemisphere contains the homonymous fibers of the two eyes; hence,

3. The external fibers would undergo a second decussation beyond the internal capsule before reaching the convolutions, so that each occipital lobe would contain the external fibers of the eye of the same side and the internal fibers of the eye of the opposite side.

This Grasset offers as a scheme of explanation in lieu of those rejected.

DEEP ULCERS OF THE CORNEA AND THEIR ANTISEPTIC TREATMENT.—Guaita (*ibid.*, April, 1883) finishes in this number his series of papers upon deep ulcers of the cornea and their antiseptic treatment, and arrives at the following conclusions: In perforating ulcers of the cornea, the antiseptic medication by boracic-acid spray and dry salicylated dressings, with an ointment of eserine, produces certain and rapid cures. In ulcers of the cornea, produced by wounds from finger-nails, this medication, with eserine or atropine, gives equally good and sure results, though not so rapid as in the first class of cases. In the sloughing ulcers of the cornea, antiseptic medication gives good results in a large number of the milder cases. In severe cases, after Saemisch's incision, this treatment hastens cicatrization, and thus aids in preventing the formation of an opaque staphyloma.

A CASE OF CYSTICEROUS CELLULOSÆ IN THE VITREOUS; EXTRACTION OF THE PARASITE; PRESERVATION OF THE EYE AND OF THE VISUAL POWER PRESENT.—Haase ("Arch. of Ophth.," xii, 1) reports a case of intraocular cysticercus in a man aged twenty-one. There was a detachment of the retina of the right eye, and in the center of the detached portion a perforation had occurred, from the opening of which protruded the head and neck of a cysticercus in the most active motion. The parasite was extracted by the meridional scleral section. The globe having been drawn inward as far as possible, an incision was made into the conjunctiva, 1.5 cm. long, as far back as feasible, and detached it on both sides of the incision, so as to expose the sclera. The hæmorrhage having been completely arrested, an incision was made with a small cataract knife, 10 mm. long,

down to the vitreous. A small pair of iris forceps was then introduced twice into the vitreous, in order to seize the parasite, but in vain. The wound was then widened by a few millimetres with scissors, and the cysticercus was then removed. The wound in the sclera and that in the conjunctiva were then united by two catgut sutures, and a pressure bandage applied. The operation was done under all antiseptic precautions, including the spray, and the healing followed without the slightest reaction. On the thirteenth day vision was the same as before the operation—that is, the patient distinguished movements of the hand at three feet.

LESIONS OF THE OPTIC NERVES IN CRANIAL DEFORMITIES.—Hirschberg (*"Centralbl. f. prakt. Augenheilk."*, Jan., 1883) reports seven cases of disease of the optic nerve occurring in patients with deformed skulls, either congenitally or acquired in the first months of life, mainly from too early ossification of the sutures. The *first* case was that of a boy, aged five, whose cranial defect was scaphocephalus with premature sagittal synostosis. The nasal septum was deflected to the right side, with extensive widening of the bones of the nose, which pointed to a possible deviation in the os planum of the ethmoid, and a probable meningitis occurring in early life. The frontal vein was enormously developed. In both eyes there was choked disc in the retrogressive stage. Eight years later Hirschberg saw the child again. The eyes were prominent, the left diverged: R. E., V = $\frac{1}{20}$, with a marked concentric limitation of the field of vision; L. E., no perception of light. Optic discs in both eyes of a greenish-white color and of indistinct contour. The *second* case was in a girl, aged three, with a marked protuberance in the center of the frontal bone from hyperostosis or synostosis of this bone, which had been noticed for more than two years. In both eyes there was inflammatory atrophy of the optic nerve, which had probably existed for more than a year, as the very marked defect of vision had existed for that length of time. The degree of vision could not be determined, but the child could pick up pieces of paper from the floor. The *third* case was in a boy, aged fifteen, with a brachycephalic skull with sagittal hyperostosis. The distortion of the skull and the defective vision date from very early childhood, at which time he had convulsions and became unconscious. R. E., $\frac{1}{20}$; L. E., movements of the hand. Both optic discs gray-white, cloudy, excavated, and atrophic. The *fourth* case was in a boy, aged four and a half, with a skull of marked leptocephalic character. The child has always been wild, and had frequently fallen, probably owing to defective vision. He had been almost completely blind for nearly three years, and had frequently complained of severe headache. There was inflammatory atrophy of both optic discs, probably from meningitis. Vision was reduced to perception of light. The *fifth* case was in a young man, aged twenty, who had since birth a very high, narrow skull. R. E., $\frac{1}{20}$; L. E., fingers at 5' divergence. Both discs very white, arteries very small. The *sixth* case was in a boy, aged seven, with a congenital, towering skull. R. E., $\frac{1}{20}$; L. E., no perception of light. Brilliant white optic discs. The *seventh* case was in a boy, aged nine and a half, also with a congenital towering skull. R. E., $\frac{1}{20}$, and marked concentric limitation of the field and color blindness; L. E., complete amanroisis and divergence. Both discs white. In these cases the condition of the optic discs must be regarded as the result of an inflammatory action in the optic nerves, caused by an inflammation in the brain membranes, which itself was probably caused by the cranial deformity.

INVESTIGATIONS INTO THE RELATIONS, FORM, AND MODE OF SUSPENSION OF THE CRYSTALLINE LENS IN THE PHYSIOLOGICAL STATE.—Hocquard and Masson (*"Archives d'ophtalmologie,"* March-April, 1883) have made some extended observations

upon the relations of the lens to the rest of the eyeball, and present their results in the shape of the following propositions:

1. The crystalline lens is elastic and biconvex. The radius of curvature of its anterior surface is longer than that of its posterior surface. The line of curvature of the two surfaces is straightened a little toward the equator by reason of the permanent traction exerted at this level by the fibers of the zonule.

2. The zonule is formed of a system of five independent fibers or small cords stretched between the pars ciliaris and the vitreous humor, from ora serrata to lens. These fibers are united to the pars ciliaris throughout their entire extent by a large number of filaments directed obliquely in two perpendicular directions. They glide freely over the vitreous humor, and merge anteriorly and posteriorly into a brush or bundle of fibers. The posterior fibrillæ are merged into the vitreous humor, retina, and basal membrane of the pars ciliaris. The anterior fibrillæ become merged with the lens. The zonule is kept permanently stretched by the ciliary processes, which press upon it like the fingers of a hand compressing a system of cordage. This tension of the zonule upon the vitreous humor flattens the lens by the eccentric tractions exerted at the level of the equator.

3. The rôle of the processes in the tension of the zonule explains how it is that the lens remains firmly fixed in spite of a certain softening of the vitreous humor. When the soft vitreous humor no longer supports the zonule properly, the ciliary processes may become congested and render greater support to the zonular fibrillæ.

4. The ciliary body, by its contraction, draws the anterior part of the choroid forward and upward, and thus indirectly the posterior insertions of the zonule upward, and fixes the latter in its position upon the sclerotic by a sort of corrugation of its tissue.

5. The fibrillæ of the zonule are free and independent of each other. Hence traction is not always exercised uniformly upon all the points of the equator of the lens during the act of accommodation. This is the explanation offered for those cases in which observers, having placed before their eyes for a certain time cylindrical glasses, have observed in their eyes, after removal of the cylinders, an astigmatism in the opposite meridian.

6. The data previously acquired throw the limits of the posterior chamber of the aqueous humor much farther back than has hitherto been admitted. They show that this fluid may pass through the fibers of the zonule as far as the ora serrata. In fact, injections of soluble Prussian blue, or even of blue gelatin, made directly and gently into the anterior chamber, penetrate the meshes of the zonule and reach the anterior origin of the nervous membrane.

AXIAL ATROPHY OF THE OPTIC NERVE OBSERVED IN SEVERAL MEMBERS OF THE SAME FAMILY.—Keersmaecker (*"Rec. d'ophtalm."*, April, 1883) cites five cases of this lesion. The first was in a young man, aged nineteen, with no specific antecedents and no alcoholism, but who was a masturbator. The father was an epileptic, and had been subject to maniacal delirium. The patient began to lose his sight three months before Keersmaecker saw him. The chromatoptometric field was narrowed to a very small eccentric spot, but the scotoma could not be accurately mapped out. There was an exaggerated persistence of accidental or complimentary images outside of the scotoma. The papillæ were pale, with indistinct outlines, like the picture presented by inflammatory atrophy. The retinal arteries were narrowed and the veins engorged. Vision reduced to counting fingers at ten centimetres. The treatment consisted in the application every day of the galvanic current for five minutes for a period of two months, at the end of which time there was a marked im-

provement in the vision. The four other patients were maternal uncles of the first patient, in all of whom the symptoms were about the same. They all had defects of articulation, hemming and hawing, and spluttering in their talk. The father of these uncles was subject to chronic alcoholism, with occasional attacks of maniacal delirium.

REPORT OF THE EIGHTH SERIES OF ONE HUNDRED CONSECUTIVE CATARACT EXTRACTIONS, WITH REMARKS.—Knapp's report ("Arch. of Ophth.," xii, 1) on another series of extraction of cataract is worth reading. His method of operating has undergone some alterations. The corneal section has gradually shifted from the peripheric-linear of von Graefe into the circular-marginal of De Wecker. The excision of the iris, in cases where the capsule was healthy, has been less extensive than before. The opening of the capsule has been subjected to some experimental variation in its execution, of which, however, none has shown a superiority over the method described in former reports—namely, the peripheric incision along the corneal section with a sharp needle cystotome. The expulsion of the lens was effected in all cases by external pressure, even if in complicated and hypermature cataracts the lens was intentionally expelled, together with its unbroken capsule. The removal of cortical remnants has been done less persistently than before. The utmost care was taken to prevent any foreign substance—such as conjunctiva, blood, iris, capsule, and portions of lens tissue—from remaining in the wound. Knapp thinks that extensive laceration of the capsule gives rise to reactive processes showing the clinical picture of a plastic, and sometimes of a suppurative, inflammation, which starts from the capsule and implicates the iris and ciliary body. The remedy—excision of the anterior capsule—has proved in his hands a failure: it gave eleven per cent. of loss. The cause of this unfavorable result was probably the large exposure of the inner surface of the rest of the capsule and its adherent parts to the influence of the aqueous humor. Shreds of capsule may remain, folded or unfolded, between the lips of the corneal wound, preventing its thorough closure, and leading to different kinds and degrees of inflammation. The capsule is to be regarded as an element of danger in the extraction of cataract, and we should adopt that method of opening the capsule which makes it least liable to become the starting-point of irritative reaction. The disadvantage inherent to the peripheric incision of the capsule, the depression of the acuteness of vision in many cases by obstruction of the center of the pupil, can be satisfactorily met by a subsequent central division.

A CASE OF BINOCULAR HEMIANOPSIA SINISTRA, WITH AN ACCOUNT OF THE AUTOPSY AND OF THE MICROSCOPICAL EXAMINATION.—Liuell ("Archiv. für Augenheilkunde," xii, 2) reports an interesting case of this kind occurring in a man, aged sixty-three, whose vision began to fail in 1879. He had suffered for eight or nine years from neuralgia of the head and limbs, and for four years from paralysis agitans of the right side. The latter had slowly increased, and was accompanied by partial anæsthesia. On the night of September 27th he was seized with a violent headache, accompanied by total blindness. This was followed by vertigo, nausea, and slowness of the pulse. These symptoms slowly subsided, and in twenty-four hours he began to recover his vision, which was never, however, completely restored. The neuralgia of the head and the vertigo continued, and his gait became halting and uncertain. His vision when first examined was $\frac{2}{3}$, refraction emmetropic, and there was binocular left hemianopsia. The pupils were contracted. The retinal arteries were contracted, but there was no other abnormal sign in the fundus. In April he had another attack of total blindness, from which he slowly improved to $\frac{2}{3}$, but still the hemianopsia remained. From this time on, however, the vision

slowly diminished till he could only recognize large objects, and the right half of both optic discs became discolored. The vertigo and halting gait became worse, but there was no interference with his mental faculties. In June, 1881, a general tremor affected his entire body, from which he partially recovered, but in July he had another similar attack, accompanied by rigid contraction of the posterior cervical muscles, blindness, unconsciousness. Consciousness and a certain amount of vision returned in a few hours, and he slowly improved for six days; but he had involuntary evacuations, was very restless, and his face and neck became very turgid. All the symptoms then grew worse, he became comatose, and died on July 19, 1881. At the autopsy the dura mater was found so adherent to the calvarium that the latter could not be removed until the dura had been divided entirely. In the medullary substance of the right hemisphere was found a large and firm coagulum, nearly circular, four cm. long and two and a half cm. thick. It lay close to the center of the hemisphere, and had not involved the cortex. The neighboring brain substance was softened for an extent of about two lines. The ventricular fluid was not perceptibly increased, but the velum and choroid plexus were very vascular. The corpora quadrigemina were degenerated, and showed white softening. This condition was most marked on the left side, and extended laterally and forward, involved the corpora geniculata, the posterior and inferior parts of the left thalamus opticus, and the bottom of the fourth ventricle. A part of the left optic tract and the neighboring under-surface of the thalamus was examined microscopically, and found to contain small, glistening, spherical bodies, which were homogeneous, and refracted light highly. They were partly isolated, partly in groups. The axis cylinders were first attacked by the morbid process. The degeneration resembled amyloid degeneration, but was not identical with it.

BAND-SHAPED OPACITY OF THE CORNEA (KERATITIS TROPHICA).—Magnus ("Klin. Monatsbl. f. Augenheilk.," Feb., 1883) has a short paper upon this subject in which he gives his views as to the pathogenesis of the disease. He lays special importance upon two facts: First, on the very high percentage (20 per cent.) of cases in which the disease attacks eyes which have already suffered in nutrition; and, secondly, that the corneal changes are almost always sure to appear in those parts which, from being uncovered by the lids, are more exposed to external influences. He regards the band-shaped opacity as a specific disease of such eyes as have become partially or entirely blinded by some severe general disease. If we accept this view, and agree with Magnus in the trifling significance which the band-like shape and the chalky deposits have in relation to the entire process, we may then agree to change the name "band- or girdle-shaped corneal opacity," or "calcareous film," for the more suitable one of "keratitis trophica."

(To be concluded.)

Letters to the Editor.

AN ETHICAL INCIDENT.

NEW YORK, June 28, 1883.

To the Editor of the New York Medical Journal:

SIR: A few weeks since I was asked by some of my friends to meet a medical man in consultation who was described as being a very liberal homœopathist. I naturally hesitated, as I was fearful that no argument of opinion might be reached, and, consequently, nothing accomplished. I, however, made an appointment, and, on meeting the medical man in question, I propounded some questions to him in order

to find whether we could meet on any common ground. To my great surprise, I found him to be a graduate of the University of the City of New York, a very intelligent man, and apparently well trained in the healing art.

We proceeded with the consultation; there was nothing peculiar or heterodox about his opinions, he responded promptly to my suggestions, everything went on smoothly, and the patient made a good recovery. In a subsequent conversation I taxed him with the question, Why did he call himself a homœopathic physician? He answered that some years since a neighboring physician had reported him to Dr. —, who had been called the drill sergeant of the profession, as having infringed the rules by using *pulsatilla* in his practice. This was not denied, the doctor stating that he regarded it as a good remedy, and that he intended to continue its use. For this offense his name was removed from our medical register. The doctor stated to me that he then felt that he must belong to some medical organization, so he joined a homœopathic society. He at this juncture, however, affirmed, with almost an air of ferocity, "But I am none of your little-pill men." He expressed a disgust for some of his associates who were infinitesimalists, at the same time remarking that others, however, were good physicians in the best sense of the term, not having any dogmas, but who selected remedies just as we do—to wit: the one, in our knowledge and experience, as being the best adapted to a given case. He expressed a determination, which has been since acted upon, to resign from the society. I have told him that, if he desired it, I would make an effort to cause him to join our county society.

He proposes to do so after a little time. This has caused me to reflect upon the fact that there are evidently many real brethren in the homœopathic ranks who are essentially with us, and who deserve to sit in our councils. Webster defines a physician as being "a person skilled in the art of healing." Do we doubt that many of our homœopathic friends are otherwise than of this sort? Can we consistently assert that all of these men are quacks, impostors, and ignorant men?

If we can not, then it surely follows that the attitude of the profession, as shown in the application of the old code, violates the law of equity, certainly of charity, and is at variance with the teachings of any perfect code which regulates the conduct of one gentleman toward another.

Yours very sincerely,

OWEN D. POMEROY.

Miscellany.

THE BEHAVIOR OF THE UTERUS IN PUERPERAL ECLAMPSIA.—At a recent meeting of the Obstetrical Society of London, reported in the "British Medical Journal," Dr. Braxton Hicks remarked that the condition of the pregnant uterus during a series of epileptiform attacks had not been very closely observed, the general idea being that the uterus participated in the general excitement of the muscular system. Passages were quoted from different works on the subject, in illustration of this. The author then described two cases in which he had carefully noticed the action of the uterus. In each of them, coincidentally with a convulsion, a powerful and prolonged contraction of the uterus was observed. Between the convulsions, the uterine action was natural. He could not state the exact relationship in point of time between the convulsions and uterine contraction. He did not think that uterine contraction alone caused the convulsion; for, in the most severe cases of tonic or clonic contraction of the uterus, convulsions did not occur. But there might in these cases be increased excitability. It had been suggested that increased force of pains might result from carbonic-acid intoxication due to the convulsions. He thought the immediate supervision of uterine contraction on the convulsive paroxysms, and the quietness of uterine action between them, told against this view. The presence of these contractions, together with the disturbance of the heart and vascular system, and the pupils, showed that the muscles of organic life were liberally affected during the paroxysms of eclampsia. These prolonged and powerful uterine contrac-

tions, as well as the carbonic-acid poisoning of the mother's blood, were a source of danger to the fœtus; and, in its interest, speedy delivery was called for, if it could be effected without harm to the mother. Dr. Robert Barnes did not doubt that the immediate cause of the uterine contraction was the convulsion. Dr. Hicks's observations would lead him to reconsider the rule which he had adopted, to reject the *accouche-ment forcé*, from which he had seen disastrous results. With chloroform and improved operative measures, delivery might be effected early and safely; but the mother must be considered first. Dr. Graily Hewitt thought the disturbances of the abdominal and renal circulation, caused by pressure of the gravid uterus on the renal veins, exercised a powerful influence in producing eclampsia. He had found benefit from diminishing this pressure by positional treatment and by unloading the bowels. Dr. Routh had seen marvelous benefit in puerperal convulsions from placing the patient on her belly and knees—a confirmation of Dr. Hewitt's views. Dr. Hicks did not recommend force in the extraction of the child. As to the effect of pressure, there was often no albumin in the urine before the first convulsive seizure.

BIRTH OF AN UNRUPTURED OVUM AT TERM.—Dr. W. H. Borham writes to the "Lancet" as follows: "In May, Mrs. D., aged twenty-eight, a fine, well-made, fair woman, the mother of two children born at full period and who had had one miscarriage, was taken in labor after a pregnancy of six months and a half. Anomalous pains commenced about four hours previous to the birth of the child. When I arrived, the nurse told me the child was just expelled, lying under the bedclothes between the mother's legs. Upon raising the sheets, I found the whole contents of the late gravid uterus had been ejected. The placenta, membranes, waters, and the child were all intact; the mass was about the size of a large hat. The child was floundering about in the fluid, and struggling to be released. I raised the mass up by taking hold of the placenta, and found its total weight about nine pounds. The membranes were exceedingly tough, and, to release the child, I had to cut them with a pair of scissors, as I could not tear them open with my fingers. This is the only case [*sic*] I ever saw born in this fashion, where the child was viable, out of 7,000 cases I have attended, the nearest approach to it being one other case where the child was four months old *in utero*, the preparation of which I have in spirits. It is remarkable that the child was alive *in membrana* after being expelled in this way, and it lived for some days after. The wonder is that there was not considerable hæmorrhage or inversion of the uterus. The mother stated the pains were not like those of labor, but a sudden 'rush out of the contents of the bowels.' She had a good getting up. Had I been present at the birth, I should have ruptured the membranes, and thus prevented this singular and, as far as I know, unique labor, which may be classed as of the rarest kind."

[Such cases are not extremely rare. Should any of our readers meet with one, we would caution him not to stop to weigh the mass before liberating the child.]

THE ANASTOMOSIS OF THE CORONARY ARTERIES.—In a recent number of the "Lancet" Mr. George C. Karop says: "The question of the anastomosis of the coronary arteries has been so often debated with variable results that, as Dr. West says in his very interesting communication, the text-books show a want of uniformity, which, indeed, they could hardly help, unless they had all followed one authority. Ellis's 'Demonstrations,' eighth edition, says they descend toward the apex, but says nothing about their joining. Gray, fifth edition, says they do. Beatie, 'Practical Analysis,' says they anastomose freely; and Quain and Sharpey, on the authority of Hyrtl, one of the most successful injectors, says, or said, they do not. Some years ago, when junior demonstrator of anatomy at the Middlesex Hospital, I made some injections of the coronary arteries at the suggestion of Mr. Morris, and found that in some cases they anastomosed, and in others they did not, the latter being as two to one. I can only find actual notes of two cases, both children, one successful, the injection going in at the left and coming out at the right artery; the other unsuccessful, and where, on injecting both arteries, it was shown that no anastomosis existed. There is no record of the time after death when the experiments were made, and probably, as Dr. West points out, this may have something to do with it. His remarkable success will, of

course, reopen the matter, and be the cause of fresh experiment, but the conclusion will probably remain as before, that in some cases the anastomosis is very free, in some slight, and in others does not occur at all."

FOREIGN BODY IN THE URETHRA.—Dr. George Hunter, of Linlithgow, writes ("British Medical Journal"):

"An elderly gentleman, the subject of dysuria from prostatic enlargement, thought to aid the efforts of his bladder in its evacuation by insinuating the rounded head of his wife's veil-pin into the orifice of his urethra, and thereby opening up the passage. To his dismay, in its descent downward it slipped from his fingers, and the point of the pin disappeared from his sight. His attempts at removal only caused it to make its way farther back, and soon a discharge of blood from the meatus, and urgent but ineffectual attempts to pass urine, alarmed him, and induced him to send for me. On my arrival, I could just make out the head of the pin in the membranous urethra in front of the prostate, and could feel the point anterior to the scrotum. To remove it, I fixed the head by pressing on it from behind forward, and then impaled the urethra against the point. By steady pressure and traction on the point as soon as it emerged from the under surface of the penis, the whole length of the pin was pulled through, only the head remaining in the urethra. The point was then depressed toward the perinæum, and, by compressing the flaccid penis in its longitudinal axis, the round head of the pin was easily passed through the meatus, and the entire pin withdrawn. In its removal, not a drop of blood was lost, and the puncture remaining was not more severe than that resulting from the use of the ordinary hypodermic needle. Beyond enjoining rest and quiet for the first twelve hours, nothing further was prescribed, and my patient was next day in his usual health."

GALIUM APARINE AS A REMEDY FOR CHRONIC ULCERS.—Dr. F. J. B. Quinlan, Physician to St. Vincent's Hospital, Dublin ("British Medical Journal"), has treated cases of chronic ulcer with great success by means of poultices made from "cleavers" (*Galium aparine*). Respecting a very bad case of senile ulcer, Dr. Quinlan writes: "We had now come nearly to the end of April, and our failure in this case was complete. It appeared to me that now was the time to try the *Galium aparine*, which was beginning to peep out in all the hedgerows about Dublin. An ample supply for this and other less severe cases has since been kept up, and it has been used with the most marked success in the following manner. Grasping in the left hand a bundle of ten or twelve stalks, with a scissors held in the right hand, the bundle is cut into junks about half an inch long. These are thrown into a mortar, and pounded into a paste. This paste, which has an acrid taste and slightly acrid smell, is made up into a large poultice, applied to the ulcer, and secured with a bandage. It is renewed three times a day. Its action appears to be a slight steady stimulant, and powerful promoter of healthy granulation. Its effect in this most unhelpful case was decisive and plain to all. Healthy action ensued, and has since steadily continued; and, after a month of treatment, both ulcers have been reduced to considerably less than half their original size. If this action continue, which I have no reason to doubt, the cure will be accomplished within a measurable and short period. The patient is in the ward, and any one can see the great amount of new dermatization which has been effected during the month." Dr. Quinlan was equally successful in several other cases. He continues: "A difficulty at once suggests itself as to its general employment: viz., that in winter and spring it is not to be had at all. It appears to me that this difficulty can be effectually met by the method of ensilage, by means of which green food for cattle has for the last few years been kept perfectly sweet and fresh by burying it in silos under the ground. This plan is generally known, but all particulars about it can be learned in the pamphlet of Mr. Thomas Christy, F. L. S. (Christy & Co., 155 Fenchurch Street, London, E. C.). In the case of the *Galium*, the process would consist of cutting the herb very fine, ramming it down by screw-pressure into a glazed earthenware jar with an air-tight cover, and burying it in the ground. Thus secured from air, moisture, and heat, it would be likely to keep through the winter. One of my pupils, Mr. M. Pierce, has already laid it thus down, and will report the result to me. This plan, if successful, might be extended to other pharmaceutical

herbs; for I have always had the idea that green herbs are more powerful than dried ones. Indeed, the late Mr. Donovan, of this city, used to maintain that, to make tincture of digitalis properly, the alcohol should be brought to where the foxglove was growing, and the live plant plunged into it."

DEATH FROM THE STING OF A BEE.—"From time to time," says the "Lancet," "we are startled by the news of a death following so closely on the sting of a bee that no reasonable doubt can be entertained of the causal relationship. The occurrence undoubtedly belongs to the chapter of accidents; and an explanation can only be obtained by considering those kinds of things which are of an exceptional nature. A sting of an ordinary bee on an ordinary man is perhaps never followed by anything more than a local reaction. To explain the lethal effect, therefore, we must suppose that the virus of the bee was of an unusual nature, either as a result of admixture from without or as a consequence of some disordered action of the physiological processes of the bee. If the fault do not lie in the insect, then we must turn to the other factors of the resultant effect. There can be no doubt that the injection of the venom directly into a vein is a very dangerous matter; and it is possible that this may be the accidental circumstance so necessary to afford a reasonable explanation. We learn from the 'Sheffield and Rotherham Independent' that a small farmer, aged fifty-nine, while in good health and working in his garden, was stung in the eyelid by a bee; the signs of collapse rapidly set in, and the unfortunate man died within half an hour of the receipt of the sting. It is worthy of remark that the daughter stated that her father had been twice previously bitten by a bee, and was very ill on each occasion."

FILTH AND CONTAGION.—The relations of filth to diphtheria and kindred diseases are well illustrated in cases reported in the April monthly report of Dr. C. W. Chamberlain, secretary of the Connecticut State Board of Health. "Eight cases," he states, "were reported from Thompsonville. There was a small back yard containing the well and privy as usual, but, in addition, a deposit of filth a foot thick on a level, composed of putrefying vegetable waste, and a mongrel mass of nastiness. The ground sloped to the well and the deposit of filth came close to it. The windows of the bedrooms opened on this yard. The family that moved out had been afflicted with malignant scarlet fever, with several deaths. In quite a number of instances there have been from four to six cases in one family, or oftener all the members, and in all that have been carefully studied, some sufficient cause has been found. In one case there was a privy in the basement with a large trough, and but a few feet distant the cistern—the water supply for the family."

The dangers of contagion were also shown. Last winter there were some seventy cases of measles in Seymour, apparently spread from one person who attended a masked ball while sick with the disease. It is estimated that over a hundred cases were spread from that one center of infection; throughout the State there have been but few fatal cases.

Three cases of scarlet fever in one family were reported from Greenwich, where the disease commenced *de novo*—that is, no infection from a preceding case could be traced in the initial case. A case fatal in forty-eight hours after the attack of the disease was taken from a child convalescent from a case so mild that no physician had been summoned. The boy was playing on the sidewalk, and the mother of the ailing child, not knowing the danger of infection, and not believing it, called him in to play with her boy. In a week he came down with scarlet fever of the most malignant type, and died, as stated, in forty-eight hours.

One fatal case of small-pox was reported from paper rags. By prompt vaccination and isolation the spread of the disease was prevented. In Poquonock, a part of Windsor, there have been four cases, one fatal. The infection came from some bedding used by a small-pox patient a year or two ago, which had lain disused in the room. It was burned, but the man who burned it and a boy who was an onlooker came down with small-pox at the same time, although living quite a distance apart.

Throughout the State diseases of the respiratory organs maintained

the first rank upon the mortality lists. Dr. Chamberlain concludes his valuable report as follows: "The sanitary history of the month, like that of the year generally, thus far, has not been quite satisfactory. Exclusive of personal influence, the mortality is due to climatic changes and epidemic diseases. The latter, while not wholly under our control, can be almost wholly prevented. The field for sanitary effort is still a wide one."—*Sanitary News*.

THE OXYTOIC ACTION OF QUININE.—Mr. Hartigan, of Hong Kong, writes to the "British Medical Journal" as follows: "In three different cases I have had on several occasions to discontinue the use of quinine, because it brought on 'labor-pains,' though the doses used were small, varying from three to five grains. In one of these, during a previous pregnancy, another medical man used quinine, and discontinued it for a similar reason. All three were in fair general health, suffering only from slight malarious fever, and had never aborted. One case has come under my notice in which abortion took place, without apparent cause, after a ten-grain dose of quinine. The patient was the mother of several children, had not previously aborted, was in good health, and took the quinine to cure facial neuralgia. I know of another case of abortion occurring under similar circumstances after quinine. This action of the drug is known to the Chinese, who take it (I am told with success) for the purpose of producing an abortion, following its use by copious draughts of hot tea. I have myself heard a Chinese 'amah' (i. e., female servant) recommend it. Quinine certainly, in some cases, increases the menstrual flow."

THE STATE BOARD OF HEALTH OF WEST VIRGINIA will meet in semi-annual session at Martinsburg, Wednesday, July 11th.

THE NEW TARIFF ON DRUGS.—The new tariff, which went into effect at the beginning of this week, includes the following among other changes:

ARTICLE.	OLD RATE.	NEW RATE.
Refined glycerin,	30 per cent.	5c. a lb.
Phosphorus,	20 " "	10c. "
Castor-oil,	\$1 a gallon.	8½c. a gallon.
Croton oil,	\$1 a lb.	50c. a lb.
Boric acid,	Free.	5c. a lb.
Chromate and bichromate of potassium,	4c. a lb.	3c. "
Carbonate of magnesium,	6 per cent.	5c. "
Nitrate of potassium,	2 " "	1½c. "
Officinal preparations,	40 " "	25 per cent.
Chloroform,	\$1 a lb.	50c. a lb.
Preparations of opium,	\$6 "	\$10 "
Asafœtida,	20 per cent.	Free.
Cinchonine,	40 " "	"

THE BALTIMORE MEDICAL COLLEGE.—According to the "Maryland Medical Journal," the following appointments at the Baltimore Medical College have lately been made: Dr. Charles G. Hill, Professor of Anatomy and Clinical Professor of Insanity and Nervous Diseases; Dr. R. H. P. Ellis, Professor of Principles and Practice of Medicine; Dr. L. M. Eastman, Professor of Microscopy; Dr. J. H. Searff, Clinical Lecturer on Gynecology; Dr. J. L. Doerksen, Clinical Lecturer on Diseases of the Eye and Ear; Dr. James G. Linthicum, Clinical Lecturer on Obstetrics; Thomas H. Parramore, D. D. S., Clinical Lecturer on Oral Surgery; Dr. Z. K. Wiley, Demonstrator of Anatomy. A prominent member of the legal profession will deliver a course of lectures on medical jurisprudence.

RESOLUTIONS ON THE DEATH OF DR. JAMES L. BANKS.—At the stated meeting of the New York Pathological Society, held June 27, 1883, the following preamble and resolutions were unanimously adopted.

WESLEY M. CARPENTER,

Secretary.

Whereas, It has pleased God to remove from this world the soul of our late associate, James L. Banks, M. D.

Resolved, That we sympathize with his family in the great loss which they have sustained.

Resolved, That we cherish his memory as that of an intelligent and

wise physician, a kind and genial companion, and a conscientious, upright, and honorable man.

Resolved, That a copy of these resolutions be forwarded to the family of our deceased associate, and that they be published in the medical journals of this city.

ALFRED C. POST,

CHARLES K. BRIDDON,

JOHN H. HINTON,

Committee.

ARMY INTELLIGENCE.—*Official List of Changes of Officers of the Medical Department, United States Army, from June 23, 1883, to June 30, 1883.*—SMART, CHARLES, Major and Surgeon. Assigned to duty in the office of the Surgeon-General of the United States Army, and, in addition to his duties in the Surgeon-General's office, will continue to serve as a member of the National Board of Health. Par. 8, S. O. 147, A. G. O., June 27, 1883. —BIART, VICTOR, Captain and Assistant Surgeon. Assigned to duty as Post Surgeon at Fort Sisseton, D. T. Par. 1, S. O. 102, Department of Dakota, June 13, 1883. —WINNE, CHARLES K., Captain and Assistant Surgeon. Assigned to duty as Post Surgeon at Fort Winfield Scott, California. Par. 1, S. O. 69, Department of California, June 19, 1883. —WORTHINGTON, JAMES C., Captain and Assistant Surgeon. Assigned to duty at Cantonment on the Uncompahgre, Colorado. Par. 4, S. O. 128, Department of the Missouri, June 21, 1883. —EVERTS, EDWARD, First Lieutenant and Assistant Surgeon. Relieved from duty at Fort Cœur d'Alene, and assigned to duty as Post Surgeon at Fort Lapwai, Idaho. S. O. 81, Department of the Columbia, June 14, 1883. —STRONG, NORTON, First Lieutenant and Assistant Surgeon. Relieved from operations of par. 2, S. O. 42, C. S., Department of the Platte, and assigned to duty with battalion infantry now on duty between Forts Thornburgh and Bridger, Wyoming. Par. 2, S. O. 83, Department of the Platte, June 21, 1883. —To be assistant surgeons, with the rank of captain, after five years' service, in accordance with act of June 23, 1874: Assistant Surgeon Victor Biart, June 6, 1883; Assistant Surgeon William W. Gray, June 6, 1883; Assistant Surgeon Louis Brechemin, June 6, 1883; Assistant Surgeon Louis A. La Garde, June 6, 1883; Assistant Surgeon Junius L. Powell, June 6, 1883. A. G. O., June 25, 1883.

NAVAL INTELLIGENCE.—*Official List of Changes in the Medical Corps of the Navy for the week ending June 30, 1883.*—Surgeon E. Kershner, from the Navy Yard, New York, July 1st, and ordered to the receiving ship Colorado, New York. —Assistant Surgeon T. C. Craig, detached from the Colorado, July 1st, and ordered to the Naval Hospital, New York. —Assistant Surgeon J. H. Bryan, detached from the Naval Hospital, New York, and ordered to the Museum of Hygiene, Washington, D. C. —Passed Assistant Surgeon L. G. Heneberger, detached from the Museum of Hygiene, and ordered to the Navy Yard, New York. —Passed Assistant Surgeon J. T. Bransford, detached from special duty at Washington, and ordered to temporary duty at Naval Academy, Annapolis.

SOCIETY MEETINGS FOR THE COMING WEEK.—*Tuesday, July 10th:* Medical Society of the County of Chautauqua, N. Y. (Mayville—annual); Medical Society of the County of Clinton, N. Y. (Plattsburg—semi-annual); Medical Society of the County of Jefferson, N. Y. (Watertown—semi-annual); Medical Society of the County of Madison, N. Y. (annual); Medical Society of the County of Oneida, N. Y. (Utica—annual); Medical Society of the County of Ontario, N. Y. (Canandaigua—annual); Medical Society of the County of Rensselaer, N. Y.; Medical Society of the County of Schuyler, N. Y. (semi-annual); Medical Society of the County of Tioga, N. Y. (Owego); Medical Society of the County of Ulster, N. Y.; Medical Society of the County of Wayne, N. Y. (annual); Newark (N. J.) Medical Association (private); Jersey City Pathological Society; Tremont (N. J.) Medical Association (private). *Wednesday, July 11th:* Medical Society of the County of Cayuga, N. Y.; Medical Society of the County of Seneca, N. Y. (annual); Tri-States Medical Association (Port Jervis, N. Y.). *Thursday, July 12th:* Medical Society of the County of Fulton, N. Y. (Johnstown—semi-annual). *Friday, July 13th:* Medical Society of the Town of Saugerties, N. Y.

Lectures and Addresses.

A CLINICAL LECTURE ON ANATOMICAL LESIONS OF THE FE- MALE PERINÆUM.

DELIVERED AT THE LONG ISLAND COLLEGE HOSPITAL,

By A. J. C. SKENE, M. D.,

PROFESSOR OF GYNÆCOLOGY; VISITING PHYSICIAN TO THE HOSPITAL.

GENTLEMEN: I desire to call your attention to the subject of lacerations of the female perinæum, and the results which may occur if appropriate treatment be neglected for the restoration of its function.

The various degrees of this laceration are clearly stated in our modern text-books, consisting as they do of three degrees, viz.:

1. Superficial rupture of the fourchette and perinæum, not involving the sphincters.
2. The rupture extending to the sphincter ani.
3. Rupture through the sphincter ani, which may involve the recto-vaginal septum.

There are some lesions, however, the final results of which have not been discussed in our literature at the present day, and to which I would specially direct your attention, while discussing the subject of perineal lacerations, in those cases who may present themselves at our clinic to-day.

The first to which I shall direct your attention is the separation of the perineal muscles at their junction in the median line, without an accompanying laceration of the vaginal mucous membrane or the integument of the perinæum. The appearance of the parts, viewed externally, gives no evidence of the lesion, the distance from the posterior commissure to the anus being perfectly normal. On separating the labia, however, or on introducing the speculum, the posterior vaginal wall also appears to be uninjured, but, upon examination by the touch, the deeper structures of the perineal body are observed to be absent. In passing the finger into the vagina and making pressure backward and downward, the mucous membrane of the lower portion of the vagina can be brought directly in contact with the integument below.

A similar condition of things I have quite frequently observed in patients upon whom the operation of perineorrhaphy had been performed, with the result of obtaining union of the integument and mucous membrane without restoring the perineal body.

In this condition of separation of the deeper structures of the perinæum, the effect is precisely the same as in those cases where the mucous membrane and integument have also been lacerated, as they ordinarily are. The sustaining and supporting power of the perinæum is entirely lost. The integument and mucous membrane are relaxed, and hence permit eversion of the vaginal walls, and subsequently prolapsus of the uterus and bladder. In one case which I have seen—a lady of over sixty years of age—it appeared that a portion, at least, of the sphincter-ani muscle had been ruptured; at

any rate, the patient had very imperfect control of the rectum, and still, on superficial examination, the perinæum appeared to be complete, so far as skin and mucous membrane were concerned. I am inclined to think that what has been described by Matthews Duncan and others as functional imperfection of the perinæum has really been this subcutaneous laceration of the central structures of the perinæum.

Regarding the cause of this condition, I am inclined to believe that it is the same as that in ordinary lacerations—namely, parturition.

I accept this view of the causation because in all the cases I have seen there has been a precedent parturition. In these cases it would seem that the elasticity of the muscular structures was less than that of the integument and mucous membrane, so that, while the former gave way when put upon the stretch, the latter came out uninjured.

Regarding the treatment of this condition, I am not quite satisfied that anything of value can be done for it. If the case is recent and the perineal muscles have not become atrophied, then I believe it would be good practice to divide the integument and mucous membrane, and, if need be, removing the superabundant portions of these latter, bring the deeper parts together—if possible, with sutures, as in the ordinary operation for restoring the perinæum. The second condition is more rare than the one just described, and consists in atrophy of the perineal muscles, including the levator-ani muscle.

A typical case of this affection came under my observation in 1879. She was forty-four years of age, married, and had had several children. She had prolapsus of the vaginal walls, and a slight prolapsus of the uterus. These conditions were quite apparent on superficial examination; but a more careful study of the case revealed the following: The distance from the posterior commissure of the vulva to the anus was normal; but, upon grasping the perinæum, with the index finger in the vagina and the thumb upon the outer surface, no intervening muscular tissue could be detected. The posterior vaginal wall could be brought in direct contact with the integument. On the most careful digital examination by the vagina, I failed to detect any evidence of muscular tissue. Running from the center below to the left sacro-iliac junction, the rectum could be distinctly felt firmly contracted, feeling through the vaginal wall like a cord the thickness of the finger.

This was demonstrated by passing a catheter into the rectum, showing that there was firm contraction of its muscular walls, and yet its dilatibility remained normal, as evidenced by the fact that the bowels moved easily and freely. Although there was a marked prolapsus of the posterior vaginal wall, there was not the slightest rectocele. When the patient assumed the erect position, the anus and perinæum bulged downward; this was also apparent when the patient was in Sims's position, with the knees drawn up. The anus projected downward until it came nearly on a line with the lower portion of the nates. In fact, the descent of the remains of the perinæum and anus presented an appearance not unlike that which is observed during labor, when the fetal head begins to push these parts downward.

It was clearly evident to me that all the muscles which form the floor of the pelvis had become entirely atrophied. This view was confirmed by the fact that all my efforts to restore the tonicity of the parts failed, and the only relief afforded was by the use of a perineal pad. In seeking for the cause of this condition, I have been unable to find anything definite. It is just possible that this patient suffered a subcutaneous separation of the perineal muscles during one of her confinements, and that long disuse of the muscles after this separation caused fatty degeneration. This is a rational explanation of the atrophy of the perineal muscles, but not of that of the levator ani.

Perhaps the levator-ani muscle was congenitally defective; or, again, it may be that the separation of the other perineal muscles imposed an unusual strain on the levator ani, which caused it to become atrophied. All this, however, is speculation in relation to the genesis of these peculiar affections of the female perinæum. The point of most importance at present is, to know that such injuries to the perinæum do occur.

In regard to the treatment of those cases, it is clearly evident to my mind that the only possible way of repairing the damage is to operate as soon after the injury as involution will allow. Because the longer the separated muscles are functionally inactive, the more certainly will they undergo degeneration and become permanently useless.

There is still another important fact connected with injuries to the perinæum to which I have already called attention—namely, the atrophy of the muscles which takes place in laceration of long standing. In such cases perineorrhaphy, as ordinarily done, gives very poor results. Good union of skin and mucous membrane may be obtained, so that the operation may appear to be a success, but the wasted muscles can no longer perform their function, and the operation is practically a failure. Integument, mucous membrane, adipose and areolar tissue do not constitute a perinæum capable of supporting the pelvic viscera.

CASE I.—Laceration of the perinæum in the first degree. Patient under ether.

The patient now before you came into the hospital last night suffering from simple laceration of the perinæum of the first degree, involving the sphincter vaginae and part of the perineal body. This condition is very deceptive, looking as though there was more perinæum than there really is. The amount of the perineal body is, however, readily shown by passing a sound into the rectum and measuring the perinæum above; you can here distinctly estimate the extent of the laceration.

I will now show you the several steps in the operation, the first being to vivify the tissues. This we do with the scissors, with which you can make the parts to be united perfectly smooth. But to do so you must have the central portion put upon the stretch by the aid of your assistants. By adopting this means you can trim your surfaces and edges perfectly straight.

You will observe that my first suture I insert at the anal portion of the laceration, passing each subsequent suture upward until I have now applied three sutures. The fourth suture I specially call your attention to, and its man-

ner of insertion. I first enter it through the integument upon one side, then carefully carry it through the lateral half of the body of the perinæum, and then sweep the needle round through the central portion until I reach the extreme limit of the vivified tissues high up in the vagina. By this means I completely close the upper portion of the wound and leave no room for the vaginal secretions to enter. You have also noticed that during all this time my assistant has carefully sponged away all blood oozing from the parts, to let me see what I was doing, and also to insure, as far as practicable, a union by first intention by leaving the parts clean. I have also inserted a fifth suture, simply passing through the tegumentary borders of the wound in order to still further guard against secretions entering the wound.

The ligatures having now all been tightened, the patient will be placed in the ward, and the bowels kept gently open, in order to prevent any strain upon the parts until they unite. The laceration is not a great one, and only calls for surgical treatment to prevent a prolapsus of the vaginal walls which was being developed. This is the simplest form of laceration, and hence the operation for its restoration is easy and simple. The time required to operate was only twenty minutes, and yet you observed that no undue haste was made. (Patient presented to the class two weeks after, and the result proved to be good.)

CASE II.—This case is one of Dr. Stewart's, and I will, therefore, request him to give you a brief history of her case.

History as given by Dr. Stewart.—This patient was confined in the hospital, and sustained a laceration of the perinæum extending into the rectum. I performed the immediate operation, putting in five or six sutures. The operation promised very well, but at the end of four or five days there commenced a purulent discharge; injections were carefully used, and all the procedures in such cases were gone through with, but without arresting the discharge entirely. We recognized that we had at least partial union when we removed the stitches. This woman is brought here to-day to show how, even under most unfavorable circumstances, we may get union by primary operation for restoration of the perinæum.

In this case there really is more perinæum than is apparent. In fact, we find a tolerably good perinæum, which result is quite remarkable under the circumstances, to say the least of it. The doctor has obtained as good a result as was seen in the case which I showed you—the one that was operated upon years after the injury. I have, however, perhaps a little more perinæum in my case. I do not believe that either of us obtained perfect union of the ends of the sphincter muscles, but we secured the next best thing—union through the medium of considerable scar tissue, so that the sphincter can perform its function by contracting toward the perinæum as the fixed point. So you see that the anus is drawn forward because of this fixed point of scar tissue; she, however, has perfect control of the rectum. This is proved by the testimony of the patient and the fact that, as I introduce my finger into the anus, the muscle contracts toward the fixed point firmly enough for all practical purposes, and the patient will be able to get along well enough.

These cases are called perfect results; they are, perhaps, good enough, and we are glad to get them, but yet they are not the most perfect results attainable. This case gives us the opportunity to call attention to the importance of the primary operation, as it is called, in laceration of the perinæum. There has been some discussion about that of late years, some claiming that, if you simply bring the parts together without sutures, you may secure union, and that you are not more likely to obtain it if you introduce sutures; for this reason some have advocated this mode of treatment. Others, again, and I think that the great majority of gynecologists of the present day, favor the primary operation. By that I mean the immediate operation, which is performed as soon as you have removed the placenta, and the uterus has contracted. Do not leave your case and go home, and then return the next day to perform the operation, because then the parts are not in a condition to unite by first intention; if you disturb them by manipulation, you then, also, utterly spoil the possibility of union without sutures. If you are careful to remove all blood-clots and bring the parts together, and bandaging the limbs to secure perfect rest, you may get union if there is not much subsequent hæmorrhage. Union has frequently occurred under those circumstances. So, if you propose to trust to nature, you had better adopt this plan; but do not change your mind and use sutures the following day, because that would almost insure failure.

I am a great advocate for the primary operation, and in all cases of any importance I believe that it is always well to introduce sutures, if you do it properly, putting in your stitches just tight enough to keep the parts in apposition.

I remember a case which made a profound impression upon me. I was sent for by a medical gentleman in the case of a primipara, and, on examination, I found a breech presentation, with the os partially dilated. I suggested that he might wait awhile. The patient had a masculine pelvis, and I thought it would be advisable to secure perfect dilatation before attempting delivery. I heard no more of the case until the following morning at about the same hour, when her physician again sent for me. I then found, upon examination, the os fully dilated, the labia œdematous, and the nates of the child presenting at the vulva and extremely dark in color. The physician told me that the os dilated soon after I left on the day previous, the breech at once settling down in the pelvis, where it remained. We proceeded at once to remove the child, and succeeded in extracting the feet and bringing down one arm, and, while I was bringing down the other arm, the doctor whispered to me that they were very anxious for the life of the child. At this moment the little fellow moved one of his feet, much to my surprise. I then extracted rapidly, and succeeded in obtaining a living child. I, however, tore the perinæum through to the rectum, the parts being in that extremely œdematous condition they had lost their elasticity.

This patient began the process of parturition late in life, and this long-continued pressure (in all three days) rendered the parts so œdematous that they gave way, and I made the biggest perineal laceration I have ever made in

my life. I immediately brought the parts together with sutures, though I had very little hopes of their union in such a condition, as they were so enormously swollen. However, we brought them together, and I heard no more of the patient for twenty-four hours, when I was again sent for by her physician, he informing me that he had failed to pass the catheter. I separated the labia, and found a dark, sloughing mass, which rendered it quite difficult to tell where the meatus was. I, however, made gentle pressure at the point where I supposed it should be, and, without further difficulty, passed the catheter and evacuated the bladder. The doctor passed the catheter once or twice afterward, when all at once the patient urinated of her own accord, he thinking it was all right; but, upon a careful examination, it was discovered she had a vesicle fistula.

I saw her a week after, when the labia and thighs were covered with an ill-conditioned-looking diphtheritic exudate. It was a horrible condition to be in, the lochial discharge flowing over these surfaces, and the urine dribbling away. She, however, recovered from this, and you will hardly believe me when I tell you that the vesicle fistula closed of its own accord—a thing which does sometimes occur. When we removed the stitches from the perinæum, it was found that she had a perfectly good perinæum, and a good sphincter; I have never yet seen a better.

That case made a profound impression upon me, for, if we can get union occasionally in such cases, we can have good hope for success in simpler ones. I would say, always perform the primary operation when the condition of the patient will permit, for, if you do not get union, you can operate subsequently. If you get just a little union, it is some gain. There is really every argument in support of the immediate operation. You have everything to gain and nothing to lose.

The child in this case was a splendid-looking little fellow after the ecchymosis disappeared; but, after all our trouble in the case, he did not survive. His bowels positively refused to act. Upon an examination being made, it was discovered that the colon was nothing but an impervious cord.

CASE III.—You doubtless remember the patient whose perinæum I endeavored to restore a week since; she had suffered long from marked constipation. I at that time stated that I should order the bowels to be moved freely each day after the operation, and adopting the new order of treatment, to which I call your attention—viz., to keep the bowels free in place of confining them, as we used to do after restoring the perinæum. The day following the operation a full dose of Rochelle salts was administered, and the following morning it was repeated; when it was time for this to have acted, an enema of ox-gall with soap and water was given. On the following day castor-oil was given, followed by another enema of ox-gall with oil; this, however, failed to secure the results anticipated, and was therefore abandoned and the following prescription substituted: One ounce of senna leaves put into a quart of water and boiled down to a pint, then adding an ounce of Rochelle salts; two ounces of this preparation was given to the patient every thirty minutes; in all, five doses were given, which secured

copious and easy evacuations; and this morning it was repeated with a like effect.

I mention this case to show you how extremely difficult it is at times to move the bowels in women who are habitually constipated. This patient's bowels were moved usually but once in two or three weeks. This seems incredible, and for a long time I used to doubt this when told so by the patient, if she retained a fair degree of health; I, however, fully believe it now, having seen many patients like this one. I am indebted to Dr. Palmer for the prescription last used in this case. I was telling him of my difficulty in some of these obstinate cases, and he informed me he had encountered the like difficulty, and had found that this preparation answered admirably. I therefore adopted it in this case, and effected the most satisfactory results. The movement of the bowels has done no harm, so far as we know, to the perinæum, although the laceration involved the sphincter ani. I always feel a sense of safety when the bowels move without causing any bleeding, for, if the newly formed tissues were separated, it would occasion more or less hæmorrhage. What the final result may be here I do not know. I, however, feel quite confident of securing a good result.

This case fully illustrates how we may be disappointed in the action of our cathartics, although the patient here had taken sufficient to move a whole company of soldiers, but upon her it produced no effect.

Hæmorrhage in these operations is often a source of difficulty and delay to the operator, but, worse than that, it is sometimes the cause of failure. In the vast majority of surgical operations, all that is required of the surgeon is to arrest the hæmorrhage in order to secure a good result; but in the operations in question, if styptics have to be used, the operation fails. Cases differ so very much in regard to hæmorrhage that I have given much thought as to the predisposing causes of this bleeding tendency, so marked in some patients. The hæmorrhagic diathesis in its most typical form is generally found in men, but a less marked hæmorrhagic tendency is common to many women, who are very unpleasant subjects to operate upon. During the past few years it has been my misfortune to meet quite a number of cases in which the bleeding tendency was noticeable. The cause of this in most of them, I think, was due to impaired general health, due to exhausting conditions of life rather than to any congenital imperfection of the blood itself. Another very important element I found to be mechanical interruption of the circulation, the pelvic organs becoming congested from retardation of the portal circulation, induced by hepatic disorders, sedentary habits, tight lacing, and so forth. The products of former pelvic inflammations, such as pelvic cellulitis, also tend to maintain a hyperæmic state of the pelvic organs; this we often find long after all evidence of active inflammation has subsided.

The condition, also, of the uterus and perinæum is often favorable for bleeding; the well-defined vascularity which exists in conditions such as imperfect involution insures hæmorrhage in all operations undertaken during such unfavorable states. The possible hæmorrhage from such causes can be avoided by the proper selection and preparation of your cases before operating. This fact is well known

to all gynæcologists, but I mention it now because others less familiar with the diseases of women are liable to neglect this very important matter. I know this to be true from having patients sent into hospitals for operations which they are not at all prepared to undergo. It also happens occasionally that I am called to operate in private practice at a time when I can only suggest a course of preparatory treatment.

The rule which should be followed in this matter is to secure the best possible state of the general health of the patient, and to reduce all hyperæmic states of the pelvic organs as far as possible. This is generally possible to a great extent, because the object of plastic operations is to restore the organs to their original form and structure, differing in this regard from many other operations in surgery which have for their object the removal of diseased parts.

In carrying out this plan of treatment, however, there is one difficulty encountered in practice: when the patients are ill and suffering, they will gladly accept an operation which promises them relief, but, when they are relieved from pain and have gained in health, they hesitate about undergoing any surgical treatment which is designed to keep them from suffering in the future. This, however, does not persuade the surgeon from doing otherwise than that which is best. There are cases—fortunately very few—who have the hæmorrhagic diathesis sufficiently marked to debar them from operations, and it is doubtful if any preparatory treatment will change this constitutional peculiarity. Such subjects should be let alone: to operate in these cases is dangerous, and almost always ends in failure. I have had three such cases in the past five years; two of them were operated upon before discovering their peculiarity, the results being depletion of the patients without any benefit from the operation, and the development of extreme caution on the part of the operator in selecting cases in future. The third case was diagnosticated earlier, and I declined to operate.

These few remarks regarding the predisposition to hæmorrhage, and the best means of overcoming the same, bring me to the point of my subject, and to which I desire to call your special attention—viz., the management of bleeding in plastic operations upon the perinæum and cervix uteri.

In restoring the perinæum, the mucous membrane only should be removed; if the deeper structures are wounded, the hæmorrhage will be much greater. All scar tissue must also be removed; but, if care is taken to separate it from the normal tissue, large vessels may be avoided. By observing these rules, troublesome hæmorrhage from the lower portion of the denuded surfaces will be avoided. Occasionally, in deep lacerations, a small artery on each side may require to be ligated; the chief arterial bleeding, however, comes from the upper portion, the small vessels coming apparently from above downward in the areolar tissue, between the rectum and vagina. These sometimes bleed quite freely, and they are not arrested by tightening the sutures which control the hæmorrhage at points lower down. Such vessels I control by passing a needle through the vaginal mucous membrane above the denuded surfaces, and thus carry

a ligature under the bleeding vessels, tying it over the free surface, and by this means controlling the bleeding on the principle of acupressure.

These sutures can be left in position until the perinæum has completely healed; they can then be removed with the aid of the speculum. Occasionally it becomes necessary to ligate some of these vessels which bleed persistently and can not be controlled in the way I have previously described; it is then well to ligate them with a fine catgut ligature, the ends being cut off short and inclosed in the wound.

In spite, however, of all precautions, you will occasionally have secondary hæmorrhage after this operation. I have met with four such cases in my practice; in one of them it occurred on the seventh day after the operation. In all of them the bleeding took place from the upper or vaginal portion of the wound, the blood flowing and widely distending the vagina before appearing externally.

In my first case I was obliged to remove the sutures, empty the vagina of blood-clots, and ligate the bleeding vessels. This resulted in spoiling my operation, although I re-introduced the sutures; union in this case did not take place. This hæmorrhage occurred on the second day.

In my three subsequent cases I secured much better results. Introducing a Sims's speculum on the *anterior* side of the vagina, I removed the clots and blood by sponging; and then, throwing light into the vagina by means of a concave reflector, I was able to see that the blood welled up from the upper portion of the wound. In place of pulling the edges of the wound apart and searching for the bleeding vessels, I passed a curved needle and ligature down and around the place where the bleeding came from, and was able, by tightening my ligature moderately, to control the bleeding entirely, these cases subsequently doing well, the result of the operation being good.

This is a practical point well worth remembering, as it will enable you to meet this accident and treat it successfully should it occur to you.

CASE IV.—This patient now before you is one who some time since presented herself suffering from a laceration of the perinæum, and upon whom I operated before you at that time. The patient comes here to-day for me to remove a suture. I remembered, after she had left the hospital, that I had left in the suture which I had applied to arrest hæmorrhage. In place of picking up the artery, I passed a needle down through the vaginal wall, bringing it out below and then ligating. I removed all my sutures afterward, but forgot this one, which I had put in to arrest the hæmorrhage; it was doing no harm, and did not interfere with the healing of the wound at all, because it was away above. This is a typical case, demonstrating the principle of which I have just spoken, showing that you can arrest the bleeding in these cases without ligating the bleeding vessel in the womb.

This suture has been in the tissues since the 15th of February; the portion which has been in the tissues is just as clean as a silver wire, but that portion in the vagina has become discolored and soiled by the menstrual flow. Now, this, with many other cases, has satisfied me that you can

prepare the silk ligature and make it aseptic. I have in my possession a piece of silk ligature which I left in the cervix uteri for more than a year.

The woman became pregnant. Soon after, I restored the cervix, and she came to me six weeks after her confinement, and I then found one of my sutures; the length of time which it had remained in the tissues was one year, two months, and twenty days; this was several years ago, and the suture is good yet. This shows that you can submit the silk to any test, and it will do less damage than the silver wire. Had I used the silver wire in that case and allowed it to remain, the patient would probably have returned to me long before.

CASE V.—This woman has borne three children, the youngest being between three and four months old, and weighing at the time of birth fifteen pounds.

Now, here you will observe, as a result of this enormous distension of the parts necessary to give birth to such a child, a laceration of the perinæum has occurred. There is really very little laceration apparent now; it, however, extended originally to the sphincter-ani muscle, for I here see, a little to one side, a scar which extends down to that point; and I think that some of the fibers of the muscle have been lacerated, as there is a want of elasticity at this portion, and I also find a hæmorrhoidal condition at the termination of the rectum.

This gives us an illustration of a laceration of the perinæum which has in part been repaired by natural or primary union, and very nicely too. There is not much scar tissue; the union has been prompt and good so far as it went. We obtain this result sometimes in lacerations—i. e., union without the aid of sutures.

We are liable to be deceived about the extent of the laceration at the time it occurs. The parts being hypertrophied, and sometimes swollen, just after labor, the laceration appears enormous, giving a feeling to the touch as if the perinæum were lacerated entirely through into the rectum; and yet, upon a careful examination, you may find it to be a laceration in the second degree only.

Now, when the union takes place promptly, as it did in this case, you get a good perinæum; but, when you get a union by granulation, which gives a large amount of scar tissue, it is apt to cause trouble, as these scars are often extremely painful. The little bit of scar tissue which you get when the union is prompt is harmless; but, when you get a mass of scar tissue as thick as your finger, with nerve-fibers caught up in this tissue, it gives rise to the most severe pain and suffering, and impedes locomotion.

I had a case of this kind last winter. The patient had a difficult labor, forceps being used in the delivery, and there was a marked laceration of the perinæum; some effort had been made to restore it, but it was a long time healing, and then only partial union was secured through a large mass of intervening scar tissue. When she had risen from her bed and attempted to walk, she was seized with violent pains in the region of the perinæum; this occurred on every subsequent attempt to walk, and finally she gave up the idea of walking. Some time after, she came under the treatment of a good practitioner, and I was called in consul-

tation, the case having previously been diagnosticated as separation of the symphysis pubis. I examined her carefully, but could find no satisfactory evidence of separation of the symphysis at that time, but yet it was impossible for her to walk. I found a large quantity of scar tissue in the perinæum, a large mass in the center so exquisitely tender that if you touched it the patient suffered agony. I immediately advised the removal of this scar tissue, and the operation was afterward performed, resulting in the restoration of a good perinæum without any tenderness; and she is now walking around and is perfectly comfortable.

While she was under the anæsthetic, I was enabled to satisfy myself beyond doubt that there was no separation of the symphysis pubis, and I do not believe there ever had been, as the result of the removal of this scar tissue tended to prove, her difficulty of locomotion and this severe pain upon each attempt to walk being due to the sensitive scar tissue.

You see, then, that in laceration of the perinæum the continuity may be restored by intervening scar tissue, and yet the result may be very unsatisfactory. When such painful and tender scars are found, the only treatment is to remove the nerve-tissue, bring the parts together with sutures, and obtain mediate union of the normal tissues.

Original Communications.

DISLOCATION OF THE STERNAL END OF THE CLAVICLE

WITH DISLOCATION OF THE FIRST AND SECOND COSTAL
CARTILAGES.

ALSO A CASE OF

DISLOCATION OF THE CARTILAGES OF THE FOURTH, FIFTH, AND SIXTH RIBS.

BY ALBERT N. BLODGETT, M.D.,
BOSTON.

CASE I.—Francis C., aged forty years, consulted me two weeks after the occurrence of an accident, which happened as follows: Two other men and the patient were engaged in lifting a square piano into a wagon, the two men carrying the weight of one end of the instrument, and our patient sustaining the entire weight of the other end alone. Suddenly the opposite end of the piano escaped from the men bearing it, and fell, causing a sudden violent strain in the patient's right arm, which was fully extended at the time. There was no appearance of injury to the arm, but the shock produced an intense pain along the entire course of the clavicle, reaching its maximum of distress at the inner extremity of this bone, thence extending downward along the right margin of the sternum as far as the lower border of the second sterno-costal articulation. There were pain and soreness in the course of those fibers of the pectoral muscle which are attached to the clavicle, and the slightest pressure on this bone at any part caused distress. Pressure over the first and second ribs also caused distress referred to the border of the sternum. Full inspiration caused great pain in the parts described above, which was most acute at the seat of the articulation of the ribs with the sternum. In ordinary quiet respiration, no pain was felt. The cervical muscles of the

right side were firmly contracted and hard, causing the patient to appear as if he had a stiff neck. The appetite was fair, the pulse normal, and the patient complained only of pain, disability, and weakness.

Inspection of the chest revealed a prominence over a space extending from the right border of the upper part of the sternum downward as far as the lower border of the articulation of the second rib, thence diffused toward the right shoulder, disappearing entirely after attaining a breadth of 5 cm. There was distinct protrusion forward and upward of the sternal end of the clavicle, it thus obliterating to a very considerable extent the right half of the interclavicular notch at the top of the sternum. The rough end of the clavicle and a portion of the articulating surface could be felt beneath the skin, where the clavicle rode upon the top of the sternum, while below was a distinct depression at the seat of the sterno-clavicular articulation, which at that time was partially occupied by the products of inflammatory action. The anterior ends of the first and second ribs were separated from their normal attachments to the sternum, and displaced laterally, leaving an interval of about 2 mm. between the sternum and ribs. The ends of the ribs were also protruded to the extent of 3 mm. in advance of the normal surface of the articulation. Continued pressure over the prominent ribs partially restored the normal surface of the chest, but, on removing the pressure, the deformity at once reappeared. There seemed to be no doubt as to the existence of an upward dislocation of the sternal end of the right clavicle, with displacement upward, inward, and forward, and of the anterior ends of the first and second costal cartilages forward and outward. The treatment was by means of bands of adhesive plaster extending over the shoulder and around the side, the arm being supported and kept at rest in a sling. Recovery was complete in four weeks, though considerable deformity still exists. The motions of the right arm and shoulder are preserved, with the exception that the patient is unable to throw a stone with that hand, and can not bring the arm up higher than a right angle in a forward direction. He can not put on a collar with that hand, though I believe he can bring the hand sufficiently near the head to comb his hair.

CASE II.—Fred. C. G., of St. John, New Brunswick, aged eighteen years, consulted me June 7, 1883, on account of obscure symptoms located in the chest. Family history is free from all indication of hereditary disease, and the patient is one of several strong and healthy children, of whom three are personally known to me.

Eighteen months ago, when sixteen and a half years of age, this young man was practicing in a gymnasium, and, while exercising upon the parallel horizontal bars, he by mistake made a "dip," in which the shoulders and body sunk to a lower level than the bars upon which he supported the entire weight of his body by his hands. A great and unexpected strain was at once brought upon all the cervical, thoracic, and scapular muscles. There was a sudden sharp pain on the right side of the sternum; the patient "felt something give way"; he could execute no movement with the right hand or arm without greatly increasing the thoracic distress, and, on going home, was unable to remove his clothes without help. Mr. Macfarland, of Portland, New Brunswick, saw the patient four hours subsequent to the injury, and found, I am told, "a separation of some of the ribs." A firm bandage with a padding of cotton was applied, which the patient wore for six months, when recovery was considered complete. Since the time of removing the bandage (now one year) there has been no pain in the part, but the patient often experiences soreness and an undefinable tenderness in the right thoracic region. During the past six months the patient has suffered from repeated attacks of hæmoptysis, occur-

ring at intervals of two to six weeks, always of moderate amount, the largest quantity of blood at any one time being estimated by the patient at less than one ounce. This was accompanied by progressive though gradual loss of flesh and a certain degree of general weakness. Has never had a persistent or troublesome cough nor expectoration, but complains of a feeling of lassitude and general disability, for which he seeks advice. Upon the chest being bared, the observer is at once aware of a striking degree of asymmetry in the anterior wall of the thorax. The entire upper portion is quite flat, and the outlines of the ribs on both sides very distinct. In the lower front of the chest a notable prominence is perceived, commencing 1 cm. to the right of a line drawn from the middle of the supra-sternal notch to the center of the ensiform appendix. This prominence occupies the seat of attachment of the cartilages of the fourth, fifth, and sixth true ribs to the sternum. The protrusion is sharply defined at the sternal border, and follows a nearly straight line from above downward.

From the plane of the back to the anterior surface of the chest-wall over the fourth, fifth, and sixth costal cartilages on the left side, the distance is 14.4 cm.; from the same plane to the anterior surface of the chest-wall over the corresponding cartilages of the right side, the distance is 15.8 cm., showing a forward displacement of the cartilages of the right side 1.4 cm. That this is a luxation of the cartilages, and not properly a fracture, is rendered highly probable, if not absolutely proved, by the fact that the patient's body is emaciated to such a degree that the outlines of the cartilages and the location of their attachment to the sternum can be both plainly seen and felt. Added to this is the important factor found in the adolescence of the subject, the articulation being eminently a ligamentous union without ossification, and the cartilages themselves being highly elastic, and not liable to a fracture in their continuity. The line of separation is also much nearer the middle of the sternum than it could be in a fracture of the cartilages, and is a direct continuation of the line of junction of the remaining costal cartilages on the same side.

The cartilages of the fourth and fifth ribs are firmly united for three centimetres outward from their dislocated ends, by means of a permanent callosity which renders them immovable one from the other. There is no such adhesion of the sixth rib to either of its neighbors. The parts are fixed in their present position, there is no pain or soreness about the chest which can be attributed to the dislocation, and the patient considers himself well so far as this injury is concerned. There is no impairment of function in the body or limbs, but the movements of the right arm seem to be executed less vigorously than those of the left. There is no indication of rachitis or of any other general disease of the osseous or cartilaginous structures of the body, and the patient's general appearance is in no way striking except as mentioned above.

Alfred Poland, in Holmes's "System of Surgery," vol. ii, p. 561, in speaking of the fractures of the sterno-costal cartilages, says that this lesion, uncomplicated with other injuries, is exceedingly rare, although recorded as early as 1698 by Zwinger, who found this fracture when examining a dead body. Malgaigne, in his work on fractures, had only seen three cases. At the Hôtel Dieu only one case occurred in 2,328 cases of fracture generally. The uncertainty whether, at the age of forty-five years, the lesion of continuity between the sternum and the cartilages of the first ribs is of the nature of fracture or dislocation, may make an accurate diagnosis of this particular injury impossible, obscured in addition as it is from the fact that con-

siderable time had elapsed since the accident before the case came under my observation, during which time the nature of the injury had been wholly unrecognized by the attending physician. It is practically of little importance, however, whether the displacement in this patient was due to fracture or traumatic dislocation, and the observations upon either of these lesions will apply to the case under discussion.

Dr. Carl Emuert states that the luxations of the costal cartilages are not to be regarded as dislocations, but that they are in reality fractures, and that the separations of the cartilages of the false ribs from their attachments is also fracture, and not properly luxation. The same authority, in again speaking of dislocation of the costal cartilages, pronounces it very rare, and states that this accident is always associated with other severe injuries. Mr. Poland further states (p. 566) that the luxation in chondro-sternal dislocation is accompanied with prominence of the cartilages and pain, and may be attended by severe symptoms, febrile excitement, and spitting of blood. He records five cases, in two of which the cause of the injury is not given; in one it was caused by violent exercise with dumb-bells, particularly in extension of the arm. The second case, in a woman, was caused by a fall during intoxication, and the third, affecting a baker, was the consequence of constant activity of the pectoral muscles in kneading bread. Of these five patients, three are reported "cured," and two are classed as "uncertain." In one of those who recovered, the injury consisted in the luxation of one of the costal cartilages forward into the sternum, which was replaced and held in position by bandages. In another, the fourth left cartilage was dislocated. In the third, the cartilages of the fourth, fifth, and sixth true ribs were dislocated forward.

Professor Gross has recorded a case of dislocation of the costal cartilages in a man of sixty, who fell ten feet, the left shoulder and chest receiving the blow. Immediately there were severe dyspnoea and a grating in the side with each movement of respiration. Examination discovered a dislocation of the last three costal cartilages from the sternum. Professor Gross adds: "Whatever form these costal cartilages may assume, their existence necessarily implies the infliction of severe injury, which can not fail to tell badly upon the soft parts, both externally and within the chest, and to be followed, when not immediately fatal, by violent inflammation."

M. Demarquay, in the "Dictionnaire de médecine et de chirurgie pratiques," when treating of luxation of the ribs, writes as follows: "Although the luxation of ribs at their vertebral ends constitutes a rare affection, it appears, according to all known observations, that the sterno-chondral dislocation has been even less frequently observed. Four carefully authenticated cases form the total list of these injuries. Chaussier reports the first case, in which the eighth rib on the right side and the seventh on the left side were dislocated in the same individual. The seat of the injury on each side was occupied by a pulmonary hernia. Charles Bell reports the details of an interesting case in which "most of the ribs" were dislocated upon their cartilages, the individual having been crushed between a post and a

the basal ganglia, the mesencephalon, the medulla, and the spinal cord. In any of these regions separately, or in all simultaneously, the cerebral cortex can probably exert its direct influence; the smaller centers are then either overpowered or controlled in their respective automatic actions by the great center of intelligence—the cerebrum.

2. THE BASAL GANGLIA.—The corpus striatum (C. S.) is shown to be associated with the motor regions of the cortex (M). A direct communication probably also exists between it and the optic thalamus (O. T.). The cerebellum is thought by some to communicate indirectly with it by means of the “processus e cerebello ad cerebrum” (4). These three sets comprise its *afferent* fibers. Its *efferent* fibers (1, 2, and 3) pass to the cells of the crus, medulla, and spinal cord. The connection shown between the cerebellum and the so-called “motor tract” will help to interpret the view held by some that that ganglion assists the cerebrum in its control over the muscular apparatus of the body.

The optic thalamus (O. T.) has *afferent* fibers, which arise from the spinal cord, medulla, and mesencephalon (5, 6, and 7), and from the cerebellum (8). It is thus brought into relation with all sensory impulses derived from the spinal nerves, and also from those cranial nerves which are not motor in function. Impressions derived from sight, smell, hearing, and taste, as well as tactile impressions, and the sensation of pain, are probably more or less intimately associated with this ganglion. The *efferent* fibers of the optic thalamus are shown to lie in the posterior part of the corona radiata, and to distribute themselves among the sensory centers of the cerebral cortex (S). The fibers of direct communication between the optic thalamus and the corpus striatum (6) help to explain the ability of an animal to perform automatic co-ordinated movements after the cerebral hemispheres have been removed and the basal ganglia left intact. These phenomena are in marked contrast to the forms of reaction which take place within the hemispheres between the sensory and motor centers of the cortex; since *consciousness* and *volition* are evoked by the latter, while the former is purely automatic. Conscious appreciation of sensations and voluntary motion are only possible when the cerebral hemispheres are present.

3. THE CEREBELLUM.—This diagram shows, in an imperfect way, the relations of the cerebellum to the paths of sensory and motor conduction. The sensory and motor centers of this ganglion (S' and M') have not been anatomically differentiated from each other, but we have reason to believe that both varieties exist. The *afferent* fibers of the cerebellum (9, 10, and 11) probably bring it into direct relation with tactile impressions by means of the spinal cord, with sensations of pain (?) by the same channel, and with various other impressions by means of nerves of special sense. Its *efferent* fibers (4 and 12) are related, in an imperfectly understood way, to the path of motor conduction. The most delicate feats of equilibrium are probably impossible without an intact cerebellum. This subject will be discussed hereafter. Each hemisphere of the cerebellum is now believed to be associated with the fibers of the opposite hemisphere of the cerebrum.

4. THE MESENCEPHALON.—As shown in the diagram,

this term includes all the parts comprised between the cerebrum above and the medulla below. The collections of gray matter, represented by the circles (M'') and (S''), comprise chiefly the so-called “substantia nigra” and the “red nucleus of the tegmentum.” The fibers associated with them (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12) constitute, collectively, the *basis* and *tegmentum cruris* of Meynert, which are separated by the substantia nigra. These two bundles have been described in the preceding lecture. The red nucleus lies beneath the corpora quadrigemina in the *tegmentum* or the sensory portion of the crus, and is in intimate relation with the fibers of the superior cerebellar peduncle (4). The corpora quadrigemina (not shown in the diagram) should be also included among the ganglionic masses of this region. The third cranial nerve is represented as structurally related to the mesencephalon. The optic nerve has also intimate relations with some of its parts.

The functions of the mesencephalic centers are too complex to justify any generalizations. All of the complex forms of muscular activity which are more especially elicited in response to some form of impression received from without by means of the nerves of special sense, such as locomotion, emotional expression, etc., are to be attributed chiefly, if not wholly, to these ganglionic centers. We know that the corpora quadrigemina are intimately associated both with the sense of sight and ocular movements, and that vision influences equilibrium to a very marked degree. The special attributes of the red nucleus of the tegmentum and the substantia nigra are, as yet, purely conjectural.

5. THE MEDULLA OBLONGATA.—Within this ganglion the nuclei of origin of many of the cranial nerves have been found, and special centers which preside over important physiological functions have also been demonstrated. The circles (M''') and (S''') in the diagram are supposed to represent the sensory and motor collections of gray matter which give to this portion of the central nervous system its peculiar powers. The motor centers (M'') are represented as in communication with certain cranial nerve roots, and also with motor fibers which serve to connect the medulla to the corpus striatum and the ganglionic masses of the mesencephalon above, and the segments of the spinal cord below. The sensory centers (S''') are shown to be in relation with the sensory cranial nerve roots (the term “sensory” being used in its broadest sense to include all fibers bearing *afferent* impulses), as well as with the paths of cerebral and cerebellar sensory conduction (6 and 10). Thus it is that the cerebellum as well as the cerebrum probably is made cognizant not only of tactile sensations and pain impulses transmitted along the spinal tracts, but also of other facts which our special senses reveal to us. The view that the cerebellum acts in part as an “informing depot” for the cerebral hemispheres can be comprehended by a study of this diagram.

The fibers which are drawn in the diagram between the motor and sensory centers of the medulla help us to comprehend the probable mechanism of many forms of complex co-ordinated reflex actions, of which the medulla is capable when all the nerve centers above it have been removed. It is apparent that each of the segments of the

nervous system here depicted is capable, by means of commissural fibers, of an action of its own which is independent of those centers above it, but which may be controlled or overpowered by the higher centers when they are called into action.

6. THE SPINAL CORD.—The diagram shows the cells of the anterior horns of the spinal gray matter (A. C.) to be in connection with the fibers of the direct motor tract which we have now traced from the cerebral cortex downward (although some have been deflected from the direct path by the cells of the mesencephalon and medulla). These motor fibers of the spinal cord are prolonged, by means of the interposed cell (A. C.), as fibers of the anterior or motor roots of the spinal nerves. The cells of the posterior horns of the spinal gray matter (P. C.) are likewise shown to receive the afferent impulses conveyed to them from without by the posterior or sensory roots of the spinal nerves (as shown by the arrow), and to transmit them upward by means of fibers which connect them with higher ganglionic masses (5, 6, and 7). The exact paths of motor and sensory conduction through the spinal cord are not positively settled. The antero-lateral columns of the cord are commonly regarded as the chief motor paths, although all observers are not in agreement respecting the anterior columns. The sensory tracts probably run partly in the central gray matter of the cord, and partly in the lateral columns. Sensory impulses travel on the side opposite to that on which the nerves enter. The views held respecting the functions of the spinal columns will be given further on.

Finally, it will be observed that the motor and sensory cells of the spinal cord communicate directly. This arrangement allows of an automatic spinal action. Beheaded animals can be made to exhibit definite muscular movements when any irritation of the sensory nerves of the skin is employed to call them forth. A frog so mutilated will scratch with the opposite foot a spot on the leg which has been touched with an acid. Robin has observed similar phenomena in a beheaded criminal. These movements are purely reflex in type, because all parts which we know to be essential to consciousness or volition have been taken away. They can only be attributed, therefore, to a direct communication between the sensory and motor cells of the spinal segment. Many of the acts which constant and long-continued practice enable us to acquire during life—as, for example, the running of scales upon a piano—are unquestionably performed automatically by the spinal cord, without assistance from the higher ganglia, in many instances.

A NOVEL OPERATION

FOR THE RELIEF OF

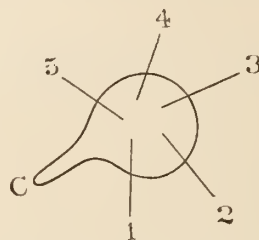
INCONTINENCE OF FÆCES.

By CHARLES B. KELSEY, M. D.,

SURGEON TO ST. PAUL'S INFIRMARY FOR DISEASES OF THE RECTUM.

The patient, a man, aged twenty-seven, was originally sent to me two years ago by Dr. McCready, suffering from ischio-rectal abscess. Although this was at once operated

upon, it did not stop the burrowing of pus, and eventually a fistula was formed, opening into the bowel well above the internal sphincter, and out on the buttock a considerable distance from the anus. This in its turn was divided with the knife, but the result of the division of so much of the bowel and of both sphincters was a considerable degree of fecal incontinence, with all of its necessary attendant evils. Treatment of the incontinence by the passage of bougies, the use of cold, etc., resulted, after a year's continuance, in great benefit, so that the patient seldom soiled his clothing with feces, except when the bowels were unusually loose; but there was an occasional passage of a slight amount of feces, a frequent escape of rectal mucus, and a constant annoying sense of insecurity in the patient's mind which made him anxious for any further relief which surgery could afford. The actual cause of the open condition of the anus lay not so much in any weakening of the power of the sphincter, which always contracted firmly around the finger in the rectum, as in the peculiar shape of the anal orifice, resulting from the contraction of the cicatrix formed by the operation for fistula. This was situated on the left side, was firm, deep, and hard, and, by its contraction, had resulted in a decided drawing of that side of the anal orifice over still more to the left, so that no amount of sphincteric contraction could close it. The condition may be seen by a glance at the diagram, in which C represents the cicatrix.



To remedy this deformity, I made with a Paquelin cautery the burns represented by the lines 1, 2, 3, 4, and 5, and also removed two longitudinal strips of mucous membrane from the inside of the bowel, clamping the tissue deeply with Smith's clamp, and using the cautery freely. The burns represented by the figures were also deep, going fairly down to the sphincter, and extending from well within the anus to the distance of an inch upon the skin, growing deeper as they reached the lower end.

The operation was followed by more pain and local disturbance than I anticipated, and there was at one time a brawny hardness in the cellular tissue of the right buttock which made me uneasy lest the patient should have another deep abscess worse than the first; but all this passed away, and, after three weeks' rest in bed, he was again able to attend to his work. At the time of writing, three months have elapsed since the operation. The wounds have healed, the sphincter contracts firmly upon the finger, the anus is closed, and the discharge has ceased. In other words, the patient is cured by the production of a stricture at the anus sufficiently tight to close the orifice, and I have no longer any fear that I might have done too much in the operation and made his last state worse than the first by producing a stricture which would need constant future care. The burns

seem to have been just sufficient to produce the desired effect, and this, it is evident, is the delicate point in the operation, and the one for which no rule can be laid down, but which must be judged of by each operator in each particular case.

"THE MADISON," 25 MADISON AVENUE.

Book Notices.

Student's Guide to Diseases of the Eye. By EDWARD NETTLESHIP, F.R.C.S., Ophthalmic Surgeon to St. Thomas's Hospital, etc. Second American, from the second revised and enlarged English edition. With a chapter on Examination for Color Perception, by WILLIAM THOMSON, M. D., Professor of Ophthalmology in the Jefferson Medical College. Philadelphia: Henry C. Lea's Son & Co., 1883. Pp. xix-13 to 416, inclusive.

THE first edition of Mr. Nettleship's book, published in 1880, proved to be a success, and a very useful little volume to the student. The second edition comes to us enlarged, with the number of illustrations considerably increased, and containing also a chapter upon the Detection of Color-Blindness, by Dr. Thomson, of Philadelphia, an authority upon the subject. The work has not only been added to, but a large number of passages have been omitted, and a careful perusal of the book enables us to repeat, still more forcibly than in our review of the first edition, that it is a work of real value to the student. The author has done well in placing the Functional Disorders of Vision in a separate chapter, immediately following the chapters on Diseases of the Retina and Diseases of the Optic Nerve. In the chapter on the Examination of the Eye by Artificial Light there is included a section on Keratotomy and Retinoscopy. Every chapter has been revised, so as to bring the work up to the present standard; and when one remembers how very great and wide-spread is the activity of our workers in the field of ophthalmology, it will readily be seen that this has been no small labor. There is very little to object to in the book, but we think it would be better not to use the term "cartilage" of the lid when speaking of the tarsus, for, though sanctioned by usage, it is faulty.

Vision: its Optical Defects, and the Adaptation of Spectacles, etc. With seventy-four illustrations on wood. By C. S. FENNER, M. D. Second edition. Philadelphia: P. Blakiston, Son & Co., 1883. Pp. 309. [For sale in New York by E. R. Pelton. Price, \$3.50.]

THE first edition of Dr. Fenner's book was published in 1875. Since then the author has died, but prior to his decease the first edition had been revised and added to to some extent, with a view to a new edition. These revisions and additions have been incorporated by the publishers in the second edition, now published. The subject is divided into three parts. In turning over the pages of this handsomely printed and sufficiently illustrated work, we meet with numerous revisions of the text all through the work, all of which have assisted in raising the standard of the book. In the second part, on Physiological Optics, there is too little space given to the anatomy of the eye, and this, we think, is a great mistake. The third part, on Errors of Refraction and Accommodation, is the least satisfactory in the book, especially with reference to the examination and treatment of astigmatism. There has been added to

this part a new section, on the Defects of Accommodation, Paresis, Paralysis, and Spasm of the Muscle of Accommodation, which is good so far as it goes, but is altogether too brief. Under this head is also considered, though very briefly, the subject of myotics. Still, there is a great deal of very useful information contained in the work for students and general practitioners, and it is presented in a clear, concise manner. The paper and type are excellent, and most of the illustrations are very satisfactory.

BOOKS AND PAMPHLETS RECEIVED.

Annual Announcement of Trinity Medical School, Toronto. Established 1850. Incorporated by act of Parliament. In affiliation with the University of Trinity College and the University of Toronto, and recognized by the several Royal Colleges of Physicians and Surgeons in Great Britain. Session 1883-'84.

Twenty-third Annual Announcement of the Bellevue Hospital Medical College, 1883-'84, with the list of graduates for 1883.

Medical Society of the State of Tennessee. Transactions, 1883, fiftieth annual meeting.

Clínica Terapéutica. Tratado de Terapéutica Médica, ó Guía para la Aplicación de los Principales Modos de Medicación á la Indicación Terapéutica y al Tratamiento de las Enfermedades. Por el Doctor A. Ferrand, Médico de los Hospitales de Paris, etc. Traducida del Francés por los Señores D. Pedro Espina y Martínez, Ex-Alumno Interno, etc., y D. Antonio Espina y Capo, Premio Extraordinario de la Facultad de Medicina de Madrid, etc. Con un Prólogo-Introducción del Dr. D. Francisco Javier de Castro, Catedrático de Terapéutica en la Facultad de Medicina de Madrid. Madrid: Administración de la "Revista de Medicina y Cirugía Prácticas," 1883. Pp. 815.

Quelques réflexions sur la lithotritie rapide pratiquée suivant la méthode du Docteur Bigelow. Communication faite à la Société de médecine de Paris dans la séance du 9 décembre, 1882. Par le Docteur Delefosse, Rédacteur en chef des Annales des maladies des organes génito-urinaires. Pp. 12.

Caso di Spina Bifida Lombare Trattato e Guarito mediante la Legatura Elastica. Con alcune Osservazioni sull' Anatomia Patologica e sulla Patogenesi di quest' Affezione del Dott. Vittorio Cavagnis, Medico Condotta di Desio (Provincia di Milano). Milano: Fratelli Rechiedei, 1883. Pp. 39. [Estratto degli "Annali Universali di Medicina."]

Pemphigus, and the Diseases liable to be Mistaken for it. By George H. Rohé, M. D., Professor of Hygiene and Clinical Dermatology, College of Physicians and Surgeons, Baltimore, etc. Pp. 11. [Reprint from the "Medical News."]

The Treatment of the Various Forms of Acne. By George H. Rohé, M. D., etc. Pp. 7. [Reprint from the "Medical Chronicle."]

Hints on the Treatment of Some Parasitic Skin Diseases. By George H. Rohé, M. D., etc. Pp. 11. [Reprint from the "Medical Record."]

Extirpation of the Uterus. By Paolo De Vecchi, M. D., Torino, Italy. Also, Note on Extirpation of the Kidney. Pp. 12. [Reprint from the "San Francisco Western Lancet."]

The Law of Human Increase. By Nathan Allen, M. D., LL. D. Pp. 10. [Reprint from the "Popular Science Monthly."]

The Prevention of Insanity. By Nathan Allen, M. D., of Lowell. Boston, 1883. Pp. 23.

Jequiritic Ophthalmia. By S. Pollak, M. D., of St. Louis, Surgeon in charge of the Eye and Ear Infirmary of the St. Louis Hospital, etc. Pp. 11. [Reprint from the "St. Louis Medical and Surgical Journal."]

THE
NEW YORK MEDICAL JOURNAL,
A Weekly Review of Medicine.

Published by
D. APPLETON & Co.

Edited by
FRANK P. FOSTER, M. D.

NEW YORK, SATURDAY, JULY 14, 1883.

THE PROGRESS OF THE CHOLERA.

WHILE we do not think the alarmist's time has yet come, and while we repeat the impression we stated last week, that there is not much probability that the cholera will reach our shores this year; it must be confessed that the situation is not so well calculated to inspire confidence as to the ultimate progress of the disease as it seemed to be a week ago.

The sanitary authorities in Egypt have by this time probably seen the folly of the policy of denying the existence of "true" cholera, and of imputing the deaths reported from it to this, that, and the other affection. On the other hand, the British Government, which, it was trusted, would feel under extraordinary obligation to put forth its full resources to prevent the spread of the infection to Europe, declines to quarantine vessels from the Egyptian port. "*Egitto*," says one of our Italian contemporaries, "*è in mano degli Inglesi e diffidiamo*." A like feeling seems to exist elsewhere in Europe, for one of the powers is reported to have threatened a quarantine against all English vessels in case England continues to ignore the just demands of her neighbors in this matter. England is certainly amenable to this sort of persuasion, and we trust that it will be brought to bear upon her at the first sign of its necessity.

By contrast, the activity and determination of the Italians are gratifying, even if the Government has shown some undue zeal in maintaining its order that a vessel should go into twenty days' quarantine at Spezia after, as is alleged, the occasion for the order had been shown to be a clerical error in the vessel's bill of health. Instead of going to Spezia, by the way, the vessel in question proceeded to Trieste, the inhabitants of which city are no doubt much interested in the clerical error alluded to. The people of Brindisi had previously refused to allow the same vessel to land the Indian mail, even after it had been fumigated. In Germany, also, a quarantine of six days has been ordered for vessels from suspected ports. Russia has followed the same course. Evidently these nations do not trust cotton merchants and canal companies. It is officially stated that a man who died of a suspicious disease in Berlin on Thursday of last week was not suffering from cholera.

The British Government may yet find its policy of inaction justified by events, and we trust that such will be the case. A little less reliance on its officials in Egypt, however, and somewhat more deference to the wishes of other governments, would be reassuring. The view entertained by the British authorities is certainly not shared by the whole people of England, for we find a writer in the "Pall Mall Gazette," Dr. B. G. Jenkins, taking a most gloomy view of the situation. Dr. Jenkins, who professes to have made a study of cholera, maintains that there are

two forms of the disease, one originating in India and the other in Arabia. It is the Arabian variety, he asserts, that has always heretofore overrun western Europe, and the present outbreak in Egypt is more readily traced to Mecca than to the Ganges. His inference is, that before the close of the year cholera will be raging in every quarter of the globe. Without accepting Dr. Jenkins's theories, the part of wisdom may nevertheless lie in acting as if they were proved.

Another element of danger is to be found in the fact that an independent focus of infection has come to light. We refer to the prevalence of the disease at Shanghai and Swatow. In view of this fact, the health officers of Atlantic ports will have to keep watch of pretty much our whole commerce, instead of concentrating their attention upon vessels arriving from the Mediterranean, and the authorities on the Pacific coast must share their vigilance.

THE SUMMER TENEMENT-HOUSE SERVICE OF THE BOARD OF HEALTH.

So far as we can judge by the list of appointments made by the Board of Health last week, in the matter of supernumerary medical officers for special services in visiting the sick poor during the remaining weeks of the hot season, the board has again displayed the good sense that has marked its course in general. We understand that about half the appointees have performed the same service during one or more previous summers, and have thus gained a good working familiarity with the requirements of the position; while among those whose names now figure in the list for the first time there are several whose standing is such that their consenting to serve in so trying a capacity can scarcely be set down to other motives than a genuine desire to be of service to their less fortunate fellow men. Certainly, there are some among them who can not have been tempted by the remuneration that the board finds itself able to allow.

To spend a great part of each day during the months of July and August in climbing the dark passages leading to the noisome abodes of the very poor; to pit their art, their counsels, and their humanity against wretchedness and disease, with ignorance, vice, and all manner of malign influences combining to make the contest appallingly unequal; to encounter distrust, petulance, and even downright brutality among those they are trying to serve—to devote to such a work as all this implies the weeks that in too many instances their own jaded condition demands should be spent in recuperation argues the possession of a spirit of enthusiasm, whether in the cause of humanity or in that of science, that the profession gets credit for only in very general terms.

Regarded merely from a medical point of view, this summer tenement-house service is unpromising. In the first place, it is in general out of the question for the physician to secure for his poor patients the sanitary and dietetic auxiliaries that are so all-important in the conflict with disease. He may furnish drugs, and they may be most appropriately chosen and most intelligently and faithfully administered, but he can not supply pure air, save for the brief periods covered by the free steam-

boat excursions to which he can obtain admission for his patients, nor can he do very much toward insuring that the food furnished them is not of a sort to do positive harm. Most discouraging of all, perhaps, is the senseless clamor for medicine, and the deaf ear turned to advice, that one meets with in this sort of practice. This, to be sure, is not confined to the victims of poverty and to the uneducated, but is met with at every turn, alike among high and low; for, like the sick man of old, the ailing are ready to do "some great thing," but show only incredulity when told to "wash and be clean." Among the well-to-do, however, this drag on the resources of medicine may be foiled with the aid of a placebo, but with the poor and ignorant such artifice calls for much more management.

But, with all the drawbacks they have to encounter, there can be no doubt that the summer medical corps acting under the Board of Health do really succeed in doing a great amount of good, unquestionably saving not a few lives that would otherwise be lost. We are persuaded, therefore, that no other disposition of the public funds could be made that would result in a greater gain to the community or a larger measure of relief to the poor.

STINGINESS IN HOSPITAL ADMINISTRATION.

THE *Directeur de l'Assistance publique* of Paris has addressed a circular letter to the directors of the several hospitals, calling attention to the unnecessary consumption of beer in the hospitals, whereby, he intimates, a drain is set up on his budget that he finds it difficult to meet. With the graceful ease with which non-medical persons in authority over medical institutions are accustomed to decide questions to suit their own views, the director says: "Beer, you know, is neither food nor medicine"—which reminds us of the "decision" of a certain Kentucky judge that sprinkling was valid baptism, the case being that of a murderess who wished to be immersed in a river before her sentence was executed.

The director has "decided," therefore, that there shall be no more beer served to the patients, save on the order of the visiting medical officer in each individual case, which order must be approved at the director's office—truly a roundabout way of getting a prescription filled. Notwithstanding the director's decision that beer is neither food nor medicine, it is certainly thought to be both by a respectable number of men who are disqualified from throwing any light on the question only by the fact of their having made dietetics and medication the study of their lives. They can not, of course, free themselves from this embarrassing drawback, and it may be that numerous other articles besides beer, which they have been accustomed to prescribe for their patients under the idea that they were food or medicine, might, if subjected to official illumination, turn out to be neither the one nor the other. M. Quentin might perform some brilliant exploits in such a line of inquiry. But, really, there is no occasion for him to assign a reason for his acts. Let him take a hint from our American managers of hospitals and dispensaries, and boldly announce that the amount of quinine and iodide of potassium ordered

must not exceed a certain maximum, or direct the apothecary to substitute cinchonine for quinine, to put up only half the quantity of any mixture ordered, to issue infusions when tinctures are called for by the prescription, and the like. Then, too, a cheap quality of ether might be provided, as is said to have been done lately in Philadelphia.

There are innumerable other devices that are perfectly well known to our hospital managers, the unflinching enforcement of which enables them to find money for useless but showy accessories, including an annual report that is generally not worth the paper it is printed on, and might with advantage be condensed into a newspaper paragraph. Evidently, however, M. Quentin is on the right road to become a "boss," for, ignoring the opportunity for genuine economy afforded by his own office, in which, as the director himself stated in 1877, the number of persons employed might be reduced twenty-five per cent. without detriment to the service—ignoring this, he has chosen to make his little show of economy by depriving the patients of an article that many prejudiced and old-fashioned people will persist in regarding as both food and medicine.

EIGHT OUNCES OF BLOOD.

SOME of our readers may remember Dr. Garrigues's case of Transfusion in Gas Poisoning, published in our issue of March 3d. The case was that of a man who went to bed in a hotel after having blown out the gaslight in his room. It appears that the porter of the house, one Banks, furnished the blood employed in the operation of transfusion, eight ounces in amount. Banks now brings suit to recover \$250, the value, he alleges, of "goods sold and delivered," meaning the eight ounces of blood, together with subsequent attendance as a "nurse."

As we understand it, Banks fails to specify what portion of the gross sum he considers to be the value of the "goods sold and delivered," and what portion he claims for professional services. This is ungenerous in Banks, for, if the case ever comes before a jury, they will need all the light they can get, including Banks's opinion as an expert, on the question of the commercial value of fresh human blood "delivered." He is said to have testified, however, that on the occasion of the transfusion Dr. Anderson, one of the physicians in attendance, told him that "every drop of his blood was worth ten cents." But even Banks himself is too modest to use this enthusiastic remark as the basis of his estimate, for at that rate, assuming that the blood in question amounted to eight fluidounces, instead of eight ounces by weight, in round numbers the "goods sold and delivered" would come to over \$300.

On the other hand, we have the testimony of Dr. Garrigues, who stated before Justice Kelly that he had performed transfusion more than once at the Maternity Hospital, and had never had any difficulty in getting the requisite amount of blood from a healthy carpenter "in exchange for one dollar and as much whisky as he took blood." Here, then, is a tangible precedent, one that perhaps it might fairly be said ought to be held as governing the market for the time being—only it has one awkward

defect in that the quality of the whisky is not stated. Moreover, a complication arises at once in the question as to the comparative value of a healthy carpenter's blood and that of a negro porter. If we may credit the author of "Hudibras," Tagliacozzi was much given to the use of porters' brawn for the material of his supplemental noses, but we are not told that Tagliacozzi's porters were of the African race. It seems not unlikely, indeed, that even the renowned Italian would have preferred a white carpenter for that particular purpose; and that such would have been his patients' choice we can scarcely doubt. But we have no wish to injure Mr. Banks's chances of getting the \$250, and we will refrain from further suggestions calculated to affect the blood market.

MINOR PARAGRAPHS.

A DECISION LIMITING THE POWERS OF CORONERS.

It has been rather a common occurrence in many localities for coroners to hold inquests in cases of death where there was no reasonable ground to suspect violence, with the object of securing the fees which the law gives in such cases. In a case of this kind in Pennsylvania the county officials refused to pay the fees, and suit was brought to compel payment. It was brought out on the trial that the deceased was nearly eighty years old, that he had been sick for some days, during which time he was under the care of a regular practicing physician; that he died a natural death in his own house, surrounded by his family; that there was nothing suspicious, sudden, or extraordinary connected with it; and that all these facts were communicated to the coroner before he summoned the inquest.

All this evidence was rejected on the trial, on the ground that the coroner was a judicial officer, and there could be no interference with him in any case where he chose to exercise the functions of his office.

The Supreme Court, where the case was taken on appeal, however, took the opposite view, and reversed the decision, which had been in favor of the coroner. The opinion was in part as follows: "The object of an inquest is to seek information, and obtain and secure evidence in case of death by violence or other undue means. If there be reasonable ground to suspect it was so caused, it becomes the duty of the coroner to act. If he has no ground for suspecting that the death was not a natural one, it is a perversion of the whole spirit of the law to compel the county to pay him for such services. In this case the inquest found the decedent came to his death 'from a paralytic stroke.' Nay, more, if under the facts offered in evidence a coroner may hold an inquest, he may, in his discretion, at the expense of the county, order a post-mortem examination, whereby those bound to the deceased by the nearest and most tender ties may have their feelings lacerated in every case of natural death. The idea is preposterous, and abhorrent to all the finer emotions of human nature. It was error to reject the evidence. If he had sufficient cause to justify his action, he may still show it. If he had not, there is no good reason why the county should pay for unnecessary and meddling services."

BEER IN THE PARIS HOSPITALS.

WHAT may be called a protest against M. Quentin's decree stopping the issue of beer to the patients in the hospitals of Paris, an account of which will be found in a preceding article, has been signed by the following-named hospital surgeons: Lo

Fort, Trélat, Duplay, Depaul, Panas, Verneuil, Desprès, Tillaux, Nicaise, Lannelongue, Richelot, Humbert, Reclus, Terrillon, Monod, Schwartz, Bouilly, Pozzi, Marchand, Berger, Gillette, Le Dentu, Delens, Lucas-Championnière, Th. Anger, Polaillon, Guéniot, Marc Sée, Cruveilhier, Horteloup, Périer, Terrier, Kirmisson.

THE CHOLERA IN EGYPT.

NINETY-SIX deaths from cholera are reported to have occurred last Saturday at Damietta, forty-eight at Mansurah, six at Samanud, six at Shirbin, and one at Alexandria. On Sunday there were eighty-eight at Damietta, sixty-four at Mansurah, nine at Samanud, seven at Shirbin, and one at Alexandria. Fifty-seven are said to have occurred at Damietta on Monday, and at that place famine has been added to the pestilence. An attempt was recently made by several European residents to break the cordon around the town, and some of them were wounded. Several of the gendarmes forming the cordons have been attacked with the disease, and fresh cordons have had to be thrown around the infected ones.

YELLOW FEVER.

LAST week there were infected ships at Ship Island and at the Pensacola quarantine station. Surgeon-General Hamilton, of the Marine-Hospital Service, does not think an outbreak likely in the United States this season, but urges the need of strict quarantine regulations. He thinks Vera Cruz is the chief point to be watched, and, if necessary, a United States inspector will be sent there. The disease is said to be spreading slowly in Havana, which port the steamship City of Mexico left last Saturday, with supposed cases of yellow fever on board, bound for New York. Since the 10th inst., all northward-bound vessels on the Mississippi River have been required to be inspected at Fort Adams before being allowed to land at any point in the State of Mississippi. At Galveston, a patrol is guarding the beach, to prevent the landing of persons from an infected Norwegian bark lying-to twelve miles out.

THE COMPARATIVE POISONOUS PROPERTIES OF COAL GAS AND WATER GAS.

A REPORT lately sent to the Brooklyn Board of Aldermen by Health Commissioner Raymond gave the following comparative analyses of coal gas and water gas, made by Professor Remsen, of the Johns Hopkins University:

	COAL GAS.	WATER GAS.
	Per cent.	Per cent.
Carbon dioxide (carbonic acid).....	0.0	0.3
Illuminants (ethylene, etc.).....	4.3	12.85
Carbon monoxide (carbonic oxide).....	7.9	28.25
Hydrogen.....	50.2	30.3
Marsh gas.....	29.8	21.45
Nitrogen (by difference).....	7.8	6.85
	100.00	100.00

Professor Remsen's opinion was that water gas was not at all dangerous if used with the same precautions as coal gas.

THE SANITARY CONDITION OF THE STATE CAMP.

A LARGE sick list is reported from the Sixty-fifth Regiment, in the State Camp of Instruction at Peekskill during the past week, thirty-three men having been reported at sick call on Sunday, and forty on Monday, mostly with diarrhoeal attacks. While it is not unlikely that much of this sickness is to be imputed to

imprudent exposure during the raw weather of Saturday night and Sunday, the necessity of keeping a close watch on the police work should not be lost sight of. It is noteworthy that, during the week that the Seventh Regiment was in camp, not a single case of sickness occurred.

THE STATEN ISLAND EPIDEMIC OF PLEURO-PNEUMONIA.

LAST week we mentioned the prevalence of infectious pleuro-pneumonia among the cattle of Staten Island. We are glad to be able to state now that the State Board of Health has sent so competent a veterinarian as Professor Law, of Cornell University, to investigate the probable causes of the outbreak, and to examine into the methods employed for limiting the spread of the disease.

POLITICS IN PROFESSIONAL APPOINTMENTS.

A CORRESPONDENT of the "Tribune" calls attention to the recent summary dismissal of Dr. A. D. Wilbor from the office of superintendent of the State Institution for the Blind, at Batavia, remarking that Dr. Wilbor has held the position for the last five years, during which time he has given entire satisfaction, and charging that the removal is made on party grounds. According to the writer in question, it does not appear that the deposed superintendent has played the part of a partisan, or that his political course has been at all active, but the allegation is made that the place was wanted for a gentleman belonging to the opposite party.

For the credit of our State administration, we trust that some explanation will be made that shall give the case a different color. Venal and grasping as our politicians are, they have usually had the decency to refrain from dismissing competent medical officials as a party measure. To bring these appointments within the range of the accursed rule "to the victors belong the spoils" would take us one step farther away from the purity of our forefathers.

NEWSPAPER NOTORIETY.

WE are willing to believe that it is generally with the best possible intentions that the managers of the newspapers bestow on members of our profession the fulsome laudation that so often attracts notice and provokes a smile. There is so little charity in the world that the physician thus puffed is pretty sure to be credited with having inspired the tributes in question; in the great majority of instances unjustly, we do not doubt. A flagrant instance has lately come to our notice, in which one of the Sunday papers gave four separate insertions to a paragraph in which a well-known member of the New York profession was characterized as "the greatest living physician." We happen to know that the gentleman alluded to was mortified and angry at the occurrence, as any man of self-respect could not fail to be. And yet he realized that the obnoxious paragraph was intended as a genuine tribute. It is passing strange that men so well acquainted with the world as to be able to manage a newspaper should not perceive that a person of sense always resents gross flattery.

RIVALRY AMONG CORONERS.

THE delights of our system of coroner's law seem to have no end. The latest illustration is furnished by a case on Staten Island, in which the physician in attendance, who is also a coroner, held an inquest on the body of his deceased patient. He had been preceded, however, by a more enterprising coroner

from a neighboring village. It is comforting to learn that both inquests led to the same conclusion as to the cause of death.

PRIZES FOR FRENCH ARMY SURGEONS.

THE French minister of war announces two annual prizes, a gold medal or 500f. each, for the best essays, by officers of the *corps de santé militaire*, on subjects connected with military medicine; also a triennial prize, of the same value, for the best essay in chemistry. The minister expresses regret that the funds at his disposal will not allow him to offer such valuable prizes as are given by other nations.

THE ENCROACHMENTS OF MIDWIVES IN FRANCE.

SOME midwives in the Department of the Haute-Garonne, in France, having advertised to treat diseases of women, in addition to their legitimate practice of midwifery, their right to do so became a question. A committee appointed by the *Société de médecine légale* to consider the matter, has reported that the midwives can not be prosecuted for their advertisements, but that any overt act on their part in the way of other practice than that of midwifery will render them liable to prosecution.

A NEW JOURNAL—"THE POLYCLINIC."

"THE Polyclinic," a new sixteen-page monthly journal, has been started by Messrs. P. Blakiston, Son & Co., of Philadelphia. The first number, dated July 15th, contains several meritorious communicated articles, an editorial giving excellent advice to the Medical Society of the State of Pennsylvania, and a good variety of selected matter. The word adopted as the name of the new journal has certainly become amazingly popular, and we do not doubt that the publication will prove worthy of its title.

A WISCONSIN SURGEON'S ALLEGED INHUMANITY.

A STORY has lately been going the rounds of the newspapers to the effect that a child's life was lost in Wisconsin recently as the result of an injury, and that a surgeon refused his services in the case because the family would not dismiss a homœopathic practitioner who was in attendance. The "Evening Post," of New York, having commented on the case, Professor William W. Seymour, of Troy, has addressed the following letter to that paper:

I am greatly surprised that a journal usually so quick to grasp the vital factors of every question can be so blinded by partisanship as to take the position the "Evening Post" does in its last issue regarding the liability of physicians and surgeons for declining to render services when called on, even in cases of life and death. The opinion used to prevail among the ignorant classes here that, as to the general public, the medical man was obliged to respond to every demand on his services or stand a lawsuit; some made the attempt, but ignominiously failed. The physician owes the general public no more than any other citizen, be he merchant, manufacturer, or priest, and not so much as a lawyer, who is an officer of the court, and may be assigned to defend a case. If, in the case of the Wisconsin surgeon, he was the only one capable of doing what was needed in the case, he, and he only, was the proper one to operate, to conduct the after-treatment, judge of the propriety of counsel and the fitness of counsel. By your very premises you state that the family practitioner was not a surgeon, and not competent to do what was necessary, and yet you apparently regard the surgeon as inhuman because he would not be trammelled by a man who could not do what he himself could for the case, and whose medical practice, if sincere, is founded on dogmas positively preventing any agreement. If the surgeon is worthy of the slightest responsibility in

such a case, he should have absolute control of its treatment and the right to name his associates.

You have only blame for the man equal to the case mentioned, but none at all for the man who, self-confessedly incompetent, would not throw up his connection with the case. The inhumanity lies with the practitioner who knew he could not render the needed services, but who tenaciously held to a connection with the case he had not the skill to treat; and with the parents, who, by their partisanship, wished to trammel the only capable man by forcing upon him this self-confessed incompetent as an adviser. As to the liability to an indictment for manslaughter in the event of a fatal termination to a case such as you mention, I beg leave to differ from the "Herald" and the "Evening Post"; and I hold that every practitioner has a moral and legal right to decline to render his professional services. The only persons to whom a practitioner owes any professional obligations are his loyal, confiding patients; those who rest on his skill, integrity, and sympathy; those who, by their friendship, love, and loyalty, have helped him to fight the battle against competition, chicanery, and ignorance. To these, rich or poor, every true physician will gladly render his best skill. To others he owes absolutely nothing, so far as his professional capacity is concerned. The fact is, the public prefers to have all the obligations and self-sacrifices on the side of the physician; it wants the privilege of decrying his professional skill and his moral character, and of building up his rivals; but, when the latter are unequal to any situation, they also want him to answer without any hesitation the summons of those whose whole previous course has been to injure him, and be grateful for the opportunity, or to run the risk of an indictment for manslaughter. If a few cases in each community in which the irregular or incompetent are unequal to the situation are allowed to die for want of the care and counsel of competent physicians, society will put itself in the hands of competent men. And as to the case you have chosen as a text, it is quite sure that in that vicinity future cases of fractured skull will be put in the hands of some one else than of the homœopath "who could not give the needed surgical care." If the strong men in the profession should thus treat the weaklings and knaves of every school, the weaklings and knaves would go to the wall, and a few funerals be the saving of many to society.

The "Evening Post" makes the following remarks on Dr. Seymour's letter:

Physicians and patients will read with interest the letter of Dr. Seymour on the medical code dispute, published elsewhere. With regard to the Wisconsin case, to our comments on which he refers, he seems to be laboring under a misapprehension. The regular physician was said to have deserted the patient, not because the family physician was not a surgeon, but because he was a homœopath. Dr. Seymour takes precisely the view of the matter that we expressed—that human life is a trifle compared with devotion to principle; that loyalty to the code is more important than health; while he adds to this the important doctrine, which we confess we forgot to dwell upon, that the only persons to whom a doctor has any obligations whatever are "loyal, confiding patients," whom he can rely upon to help him fight the battle with the homœopaths and other designing foes. This picture of the Strong Man, surrounded by his little band of patients, making a gallant stand against the "weaklings and knaves" who wish to save as much human life as possible, is as striking as anything the code controversy has brought out.

THE SUPPORTERS OF THE OLD CODE IN THE STATE OF NEW YORK.

THE Council of the New York State Medical Association for Upholding the National Code of Ethics has issued a circular, dated June 21st, in which the numbers of those who uphold the old code in the various counties of the State are given as follows: Albany, 40; Alleghany, 14; Broome, 28; Cattaraugus, 14; Cayuga, 20; Chautauqua, 26; Chemung, 21; Chenango, 46; Clinton, 27; Columbia, 14; Cortlandt, 22; Delaware, 16; Dutchess, 40; Erie, 107; Essex, 14; Franklin, 15; Fulton, 10;

Genesee, 15; Greene, 17; Herkimer, 25; Jefferson, 23; Kings, 148; Lewis, 11; Livingston, 11; Madison, 19; Montgomery, 16; Monroe, 53; New York, 742; Niagara, 25; Oneida, 58; Onondaga, 66; Ontario, 21; Orange, 18; Orleans, 16; Oswego, 20; Otsego, 15; Putnam, 7; Queens, 44; Rensselaer, 74; Richmond, 11; Rockland, 9; St. Lawrence, 13; Saratoga, 27; Schenectady, 12; Schoharie, 12; Schuyler, 12; Seneca, 21; Steuben, 18; Suffolk, 18; Sullivan, 17; Tioga, 19; Tompkins, 13; Ulster, 19; Warren, 18; Washington, 10; Wayne, 24; Westchester, 44; Wyoming, 12; Yates, 9.

THE BENEFICENT WORK OF ST. JOHN'S GUILD.

THE guild's Seaside Nursery being open for the season, the trustees give notice that destitute sick children will be conveyed to the institution by the boat that leaves the foot of King Street (Pier 38, North River) at 8 A. M., and the foot of Fifth Street, East River, at 9.30 A. M., every Tuesday, Thursday, and Saturday. Only sick children can be admitted, and they must not be affected with any contagious disease. A physician's permit is required, blank forms for which are supplied by the guild. Like restrictions apply to the excursions on the same boat, except that healthy children under six years of age are taken.

It is not easy to overrate the good that results to the sick poor of New York from the work of St. John's Guild. For many summers past the excursions have been carried on regularly under competent medical direction, and now the nursery is added to the beneficent measures taken by the organization.

THE UNION PROTESTANT INFIRMARY, OF BALTIMORE.

WE learn from the "Maryland Medical Journal" that an arrangement has been made by which the private rooms of the infirmary may be occupied by patients continuing under the care of their own physicians, even if the latter are not members of the regular staff of the institution. The plan strikes us as commendable, provided it can be carried out without irritating friction in the matter of details.

NEWS ITEMS.

PROCEEDINGS UNDER THE MEDICAL PRACTICE LAW have lately been begun by the Medical Society of the County of New York against George H. Schwab, Bruno C. Lemar, Robert Hayes, and Désiré A. Protin, charged with practicing medicine without a license or a diploma, and with not having registered at the County Clerk's office. Hayes professed to have a diploma, and pleaded ignorance of the registration law. On the strength of this statement he was paroled. The others are held for trial, each under bonds of \$300.

THE SUMMER SANITARY CORPS.—The following-named gentlemen have been appointed by the Board of Health on the corps for visiting the sick poor during the hot term: Drs. John A. Walthers, Richard F. Hoelger, John J. White, J. E. M. Lordly, Waldo H. Richardson, J. J. Williams, Henry S. Gill, William F. Green, George A. Church, E. Elliott Harris, Richard J. O'Connell, T. B. Columbia, Baldwin G. Cook, C. E. Gilbert, J. W. Gibbs, Harry B. Conrad, D. L. Carter, J. Anderson, Edward S. Dwight, Andrew F. Currier, Emil Mayer, C. T. Buffum, R. H. Roof, F. M. Townsend, W. B. Vanderpoel, D. H. Wiesner, S. A. Kletzch, Parker Syms, Alexander Duane, W. G. Thompson, Milliken Patchin, Charles E. Bull, William A. Dayton, Maurice B. Early, R. W. Walmesley, C. J. Sharretts, Charles E. Cross, D. E. Holman, F. J. Kneuper, Charles Sherman, Willard P. Beach.

AN ALLEGED CASE OF HYDROPHOBIA.—A boy is said to have died lately at Fort Hamilton, L. I., of hydrophobia, supposed to

have resulted from the scratch of a cat, the theory being that the cat had had an encounter with a rabid dog, and had imbedded its claws with the virus of the disease.

LIQUOR DISGUISED AS MEDICINE.—The tax on so-called "patent medicines" having been removed, it has been decided by the Commissioner of Internal Revenue that such preparations as "rye and rock" are subject to taxation as rectified spirits, and that dealers who sell them must pay a special tax as liquor-dealers.

THE ST. LOUIS MEDICAL SOCIETY has lately been engaged in a hot discussion of the code question, and has repudiated the resolutions introduced in its name by Dr. Pollak at the recent meeting of the American Medical Association. Dr. Pollak defended his course in a very vigorous speech, and from the reports that reach us he has a large and lively following.

THE HARVARD MEDICAL SCHOOL.—Of the seventy-three gentlemen who received the degree of doctor in medicine at the recent annual commencement, six had taken the four years' course.

THE UNIVERSITY OF WÜRZBURG.—It is reported that Dr. L. Groshey is to have the chair of psychiatry, and Dr. C. Matherstock that of cutaneous and venereal diseases.

THE UNIVERSITY OF PRAGUE.—The chair of general and experimental pathology has been offered to Dr. Spina.

DR. N. C. GOLDSBOROUGH, OF LOUISVILLE, is said to have been tendered the position of Demonstrator of Anatomy at Atlanta, Ga.

PROFESSOR BENJAMIN BALL, OF PARIS, has been elected a member of the Section in Medical Pathology of the *Académie de médecine*, in place of the late Dr. Woillez.

PROFESSOR HUMPHRY has been appointed to the chair of surgery lately created in the University of Cambridge, England.

THE PENNSYLVANIA ANATOMY LAW.—The following-named gentlemen have been elected officers of the Board of Distribution, having charge of the allotment of dissecting material to the different colleges: President, Dr. Joseph Leidy; Secretary, Dr. R. W. Deaver; Treasurer, Dr. J. M. Mears; Executive Committee, Dr. W. W. Keen, Dr. A. R. Thomas, and Dr. L. W. Steinbach.

THE POLLUTION OF THE BOSTON WATER SUPPLY by bathers in the reservoir basins near Natick has engaged the attention of the Boston Water Board, which has taken action looking to a prohibition of the practice. It is understood, however, that the people of Natick are resolved to maintain their right to bathe there.

THE BOYLSTON PRIZE for the best essay on "Measles, German Measles, and Allied Diseases," has been awarded to Dr. P. M. Braidwood, of Birkenhead, England. Our impression is that this is not the first time the prize has gone out of the country.

BODY-SNATCHING IN PENNSYLVANIA.—Dr. Charles E. French, described in a press dispatch as a convict in the penitentiary at Erie, is accused by his father-in-law of complicity in the robberies of graveyards that attracted so much notice in Pennsylvania a few months ago. French denies the charge, and alleges that his father-in-law is insane.

SMALL-POX IN PENNSYLVANIA.—Five cases were reported to the Lancaster Board of Health on Friday of last week. Several cases are reported from Providence, a suburb of Scranton.

MALARIAL DISEASES IN CONNECTICUT are becoming more prominent, according to a recent report by the secretary of the

State Board of Health, Dr. C. W. Chamberlain, of Hartford. Occasionally, he says, a case of congestive chills is seen.

SUICIDE OF A PHYSICIAN.—The painful story reaches us from Alabama that Dr. Lee Pinkston, living near Montgomery, lately committed suicide, in consequence, it is supposed, of a state of melancholy into which he had fallen after having caused the death of one of his children with a dose of morphine which he mistook for quinine. The poisoning took place several years ago.

REMOVAL OF AN ASYLUM SUPERINTENDENT.—The superintendent of the lunatic asylum of Berks County, Pa., is reported to have been removed by the Poor Directors, as the result of an investigation into charges that had been brought against him of ill-treating the insane.

AN ALLEGED CHINESE DIPLOMA was shown by a Celestial practitioner in Arizona who was lately arraigned for illegal practice, but the court is said to have looked upon it as a laundry bill, and to have imposed a fine of \$100.

PROFESSOR HUXLEY has been elected president of the Royal Society of London.

OBITUARY NOTES.

JOHN A. LIDELL, M. D.—Dr. Lidell died at his residence in this city on Sunday, the 8th inst., in the sixtieth year of his age. He was a graduate of the Albany Medical College, class of 1848, and a member of the Academy of Medicine and of the Pathological Society. The deceased gentleman was a man of notable analytical power as a writer, and he contributed many valuable articles to medical journals, most of them relating to surgical subjects. In particular, we remember an article of his that was published several years ago in the "American Journal of the Medical Sciences," on Injuries of the Head. Dr. Lidell was not personally known to the greater number of his colleagues in New York, and as a practitioner his field was restricted, but by the few who really knew him he was warmly esteemed. During the late civil war Dr. Lidell did excellent service as Inspector-General of the Army of the Potomac, and his funeral, which took place on Tuesday, was conducted by one of the posts of the Grand Army of the Republic.

RICHARD T. MAXWELL, M. D., OF SAN FRANCISCO.—A native of Philadelphia, where he obtained his degree from the University of Pennsylvania, and for some time a surgeon in the navy, Dr. Maxwell was one of the earliest representatives of the medical profession to settle in California, where he achieved prominence as a practitioner, and was widely known and esteemed. He died, June 29th, of Bright's disease, and was buried on Sunday, July 1st, from the hall of the Society of California Pioneers, of which he was a member.

ERASTUS O. PHINNEY, M. D., OF MELROSE, MASS.—Dr. Phinney died suddenly on Sunday, the 8th inst., in his seventy-fourth year. He was a graduate of the Harvard Medical School, and for many years had been a practitioner in Melrose, where he was greatly respected.

BENJAMIN BELL, F. R. C. S. EDINBURGH.—Mr. Bell, a general practitioner in Edinburgh, better known in this country by his contributions to surgical literature, died June 13th. He was the son and grandson of well-known surgeons, and was connected with various charitable institutions in Edinburgh, of one of which, the Eye Infirmary, he was one of the founders.

PROFESSOR EMILIO CIPRIANI.—This distinguished surgeon, who was also a member of the Italian Senate, died on the 16th of June, at Rome. He was a native of Florence.

Proceedings of Societies.

NEW YORK OBSTETRICAL SOCIETY.

A STATED meeting was held April 3, 1883, Dr. C. C. LEE, President, in the chair.

Dr. P. F. MUNDÉ presented four specimens, with histories, as follows:

I. OVARIAN CYST WITH LIMPID FLUID, SIMULATING A CYST OF THE BROAD LIGAMENT.—The patient was a woman, thirty-seven years of age, upon whom he operated at the Mt. Sinai Hospital in February last for removal of a supposed unilocular cyst of the left ovary. She had noticed enlargement of the abdomen for a year before, and during the preceding three or four months the symptoms and the physical appearances had been such as to lead to the diagnosis just mentioned; but, on cutting down upon the tumor, its contents were found to be perfectly clear, like those of a cyst of the broad ligament, and for a moment it was believed that a mistake had been made as to the real origin of the growth. On proceeding with the operation, however, the tumor was found to have a broad pedicle, and to consist of a large ovarian cyst, with several small cysts at its base. The patient recovered, and left the hospital on the twenty-fourth day. The cyst contained sixteen pints of fluid.

II. BATTEY'S OPERATION FOR DYSMENORRHOEA AND PELVIC NEURALGIA.—A nurse, a widow thirty-seven years of age, had been in the medical wards of the Mount Sinai Hospital for about eight months, suffering from neuralgic pains in the pelvic region, extending down the right thigh, and from hysterical symptoms. At the end of that time she was transferred to Dr. Mundé's service, where she was kept under observation for about two months, with the hope that some relief might be given by other means than the administration of opium, which she had been taking in considerable quantity. The only pathological condition discovered was what was believed to be thickening of the broad ligaments. There was a history of pelvic cellulitis. The patient stated that six years before she had suffered in a similar manner, and that Dr. Schramm, of Dresden, amputated the cervix for, as she believed, enlargement of the womb. The operation was followed by relief of two years' duration. The only means which seemed to offer any prospect of relief on the present occasion was Battey's operation, with or without removal of the tubes, and it was doubted whether, without more definite pathological indications, it was justifiable to resort to this, but he finally yielded to the patient's wishes, and, on the 28th of February last, performed the operation. Both ovaries with their tubes were removed. The right one was free, the left adherent, but no diseased condition was apparent. During the first twenty-four hours after the operation the patient was very irritable, and a large amount of Magendie's solution was required to keep her quiet. The temperature on the second day rose to 103° Fahr., but was controlled by cold water passed through a coil of rubber tubing placed upon the abdomen. Within a few days the patient recovered entirely from the operation, the pain of which she had complained before ceased at the end of three weeks, all narcotics were stopped, and it seemed that an excellent result was likely to be established permanently. Soon afterward, however, the old symptoms of neuralgia and hysteria returned, and were now worse than formerly. With regard to the title of the operation, Dr. Mundé agreed with the opinion expressed by Dr. Martin, of Berlin, in a recent publication—viz., that the term "Tait's operation" should be confined to that class of cases in which the diseased tubes were removed, either with or without the ovaries.

III. CYST OF THE BROAD LIGAMENT CONTAINING THIRTY-

EIGHT PINTS OF FLUID.—A woman, thirty-eight years of age, who had never borne children, eight years previously had observed an enlargement of the abdomen that had continued to increase gradually. At the time of her entrance into the hospital the abdomen measured forty-five inches in circumference at the umbilicus. There was no cachexia whatever, only the size of the tumor annoyed her. A positive diagnosis of cyst of the broad ligament was made, and six weeks ago thirty-eight pints of clear fluid were withdrawn. A careful bimanual examination showed that the cyst was situated in the right broad ligament. The patient left the hospital well several days later, and when she returned, after six weeks, no sign of the cyst could be detected by bimanual examination. The case was unusual only from the exceptionally large size of the cyst.

IV. PELVIC SARCOMA LIMITED TO THE CELLULAR TISSUE.—A woman, fifty-five years of age, the mother of a number of children, had suffered from an enlargement of the abdomen, accompanied by pelvic pains, which during the past two months had become exceedingly severe. The tumor was very tender to the touch, and was found to lie in the recto-vaginal space, pressing the vagina forward and downward and the rectum backward. It was tapped on two different occasions, and a thick, bloody fluid, readily coagulable, was withdrawn, with a few flocculi of pus. The diagnosis lay between sarcoma with fluid contents and pelvic hæmatocoele. After three weeks, the tumor slowly increasing in size in the mean time, without signs of septic infection, an opening was made through the vagina, and copious fresh coagula were discharged. The walls of the cavity were found to consist of irregular soft masses, which could readily be scraped out with the vaginal depressor. Microscopical examination showed it to be a round-cell sarcoma, with but little fibrous tissue. The temperature rose to 103° Fahr., and the patient died of acute septicæmia on the fourth or fifth day after the operation. Post-mortem examination showed that the disease was limited to the cellular tissue in the recto-uterine space, neither the uterus, the ovaries, nor any of the other organs in the pelvic cavity being involved in the least. He had not been able to find a similar case recorded in medical literature, although sarcoma of the uterine and of the ovaries was not very uncommon.

Dr. W. R. GILLETTE remarked, with regard to the first case, that six weeks ago he withdrew from an abdominal tumor fluid which had the exact appearances of fountain water, and those present supposed it belonged to a tumor of the broad ligament, but it proved to be one of the ovary with a small pedicle. He had had a similar case a few years ago.

Dr. J. B. HUNTER had seen several cases in which the fluid withdrawn from an abdominal tumor before its removal was perfectly clear, as in cases of cysts of the broad ligament, but which afterward proved to be cases of ovarian tumor.

The PRESIDENT thought that the usual turbidity of the fluid of ovarian cysts was due to either an acute or subacute inflammation of the lining membrane arising from pressure by surrounding organs. Where the cyst grew rapidly, and pressure did not exist, at least in great degree, the fluid was likely to be clear. This view was also entertained by the pathologist of the society and by other authors.

Dr. GILLETTE, referring to the two cases related by Dr. Mundé, remarked that he had at present two patients under his care upon whom he hesitated to perform Tait's operation, although it would seem to be indicated by the subjective symptoms, mainly for the reason that, as in Dr. Mundé's case, the operation so frequently failed to give permanent relief, and also because the symptoms apparently indicating the operation might pass away in the event of an assumption of new sexual relations in the patient's life.

This latter phase was illustrated by the following case: In the spring of 1882 a widow consulted the doctor for constant neuralgic pains in the pelvic regions, by which her life had been rendered miserable. She gave a history of having had two or three attacks of pelvic cellulitis some time previously, for which she had been treated by several physicians on the Pacific coast. All the treatment, however, had failed to relieve her of her persistent pain in either ovarian region. Her general appearance was that of a woman in good health and well nourished. Her menstruation, she said, was painful and irregular as to time, but pretty constant as to quantity. This had been her habit through life. She had never been pregnant. Upon examination, the pelvic organs were extremely sensitive, and there was considerable pain over either ovarian region upon pressure. There was so much adipose tissue that it was impossible to determine through the abdominal wall whether there was any tubal enlargement or not, and through the pelvic region it was utterly impossible to make any satisfactory examination of the condition. From her history, he presumed the case was one of pyo- or hydro-salpingitis; and his advice was that, as a last resort, Tait's operation should be performed. She stated that, if her sufferings should continue as they had, she would not hesitate, as she was perfectly miserable as she was. During the summer, however, she took a trip to Europe, and while on the steamer met a gentleman to whom she became engaged, and, on her return from Europe, they were married. From that time all pain disappeared entirely, and, so far as she knew or the doctor could ascertain, she was as well as any woman he had ever met. There was not the least degree of pain on examination, and the introduction of the probe into the uterus, which she could not tolerate previously, and which indeed at one time almost lighted up a cellulitis, was borne with perfect impunity. There was no tenderness over the ovaries, and there was no point of tenderness to be elicited anywhere, and nothing to indicate that there could be, by any possibility, any disease whatever of the pelvic organs.

This case, undoubtedly, was one not at all uncommon among widows—simply one of reflex irritation consequent upon ungratified sexual appetite. The lady herself, who was a very intelligent woman, did not hesitate to join the doctor in this his last diagnosis of her condition.

Another of the cases to which reference had been made, and which would seem to call for Battey's or Tait's operation, was that of a woman who had been a mistress, but who was now under a certain religious restraint. She had elanged her sexual relations, her pelvic symptoms had developed, and she had hysterio-epilepsy in addition to pains referable to the pelvis and ovarian regions. No enlargement of the tubes had been demonstrated in her case, but all her other sexual organs, so far as they could be examined, were in a highly hyperæsthetic condition, and at times apparently almost in a state of inflammation. In the opinion of the speaker, this case was almost identical in many of its features with the other. The patient had formerly indulged in sexual excesses. She had been seen by several physicians, and it was a question with them whether an operation for the removal of the ovaries or tubes was justifiable or not.

These cases were either or both of them typical of cases heretofore operated upon according to Battey's method, and there could be no question, probably, that, if the operation of Battey had been performed, and the ovaries removed, all pelvic symptoms might have disappeared as a matter of supposed natural consequence; but the fact that one of them had been cured by the resumption of a normal function was very interesting; and probably in many instances we ought to pause before recommending this operation to young or unmarried women on this

very account. He knew that reflex irritation from the male sexual organs produced strange phenomena, and the late Dr. Van Buren had attributed many of the nervous conditions and perturbations of men to ungratified sexual desire. There could be no question about it, that this ungratified sexual appetite created a most unfortunate series of phenomena in both sexes, and more particularly in the female than in the male; consequently it must always be estimated in considering such a serious operation as Battey's or Tait's. The modesty and native secretiveness of women would rarely assist us in such cases by a direct avowal or confession, and we ought in all cases to use every effort to determine the exact psychological state of unmarried women who were willing to submit to the severest surgical alternative that can be presented to them for a relief from pelvic pain or distress.

Dr. MUNDÉ remarked that, since in Dr. Gillette's case the patient recovered after marriage without treatment, it was an indication that the condition calling for Tait's operation did not exist.

Dr. GILLETTE remarked that he did not make a positive diagnosis of salpingitis; he simply stated that there were all the subjective symptoms of that condition. He should agree with Dr. Mundé that, if with these subjective symptoms enlargement of the tubes could be recognized with certainty, Tait's operation should be performed as soon as the patient's consent could be obtained.

The PRESIDENT thought that, in justice to Mr. Tait, it should be said he did not advocate the removal of the tubes or of the ovaries in cases simply of a neuralgic or hysterical character; that his advice to do the operation was restricted to cases in which a physical change in the structure of the tubes could be recognized on examination. In such cases greater benefit had been derived from laparotomy than from any other means, and he resorted to the operation boldly. On the other hand, Dr. Battey, of Georgia, he believed, removed the ovaries largely for dysmenorrhœa, without reference to structural change or enlargement, and he did not doubt that it was to the too great tendency which had been shown by some to resort to Battey's operation in cases of neuralgia of an hysterical character, and not to Tait's operation, which was applicable to cases in which a structural change could be recognized, that exception had been taken. He recalled a case in which an operation for removal of the ovaries was done in the case of a patient suffering from pelvic pains and hysterical symptoms, and after the operation, although the pelvic pains ceased entirely, the mental symptoms at once became worse, and finally the patient had to be sent to an asylum for the insane.

FIBROID TUMOR OF THE UTERUS REMOVED BY THE GALVANIC CAUTERY AND BY ENUCLEATION.—Dr. BACHE McE. EMMET presented the specimen. The patient from whom it was removed had suffered from hæmorrhage and partial inversion of the uterus. Before the operation, however, the organ resumed its natural position spontaneously. After some days of preparatory treatment, with the assistance of Dr. Dawson, the galvanic-cautery wire was placed around the tumor as high up as possible, and the capsule was cut through. An attempt was then made to apply the wire still higher, and, while doing so, traction was made, as indeed it had been throughout, and the tumor unexpectedly became enucleated and was removed entire. This excellent result, although accidental, Dr. Emmet believed could not have been obtained as conveniently by the use of the scissors. Enucleation was far more advantageous than excision, inasmuch as there was less danger of its being followed by hæmorrhage, septicæmia, or a return of the growth.

Dr. B. F. DAWSON thought that in this case the accidental result following traction upon the tumor after division of its

capsule by the galvanic-cautery wire suggested a method of operating which could be adopted in the future in similar cases. With regard to the President's statement, that he had found Thomas's scoop an excellent instrument with which to divide the capsule, the galvanic-cautery wire possessed the advantage of leaving a charred surface, from which hæmorrhage and septic absorption were less liable to take place, and of leaving less of the capsule behind.

HENRY J. GARRIGUES, M. D.,
B. F. DAWSON, M. D.,
FRANK P. FOSTER, M. D., *ex-officio*,
Committee on Publication.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

A STATED meeting was held February 1, 1883, the President, Dr. R. A. CLEEMANN, in the chair.

ANALYSIS OF TWENTY-SEVEN OPERATIONS FOR THE RESTORATION OF THE LACERATED CERVIX UTERI, WITH SPECIAL REFERENCE TO THE EFFECT ON STERILITY AND LABOR.—Dr. B. F. BAER read the following paper:

In the discussion which followed the reading of Dr. Playfair's paper on "Trachelorrhaphy, or Emmet's Operation," before the Obstetrical Society of London, on March 1, 1882, Dr. Herman, in the course of his remarks, said that "the American literature on the subject consisted mostly of general statements. Few writers had published cases, and the cases were mostly complicated ones." There is some force in these words. But, to avoid a monotonous repetition, it is desirable only to publish such as are strongly illustrative of the class to which they belong, or such as bear directly upon any point which may be under discussion.

In the "American Journal of Obstetrics" for January, 1883, Dr. P. J. Murphy, of Washington, D. C., makes some "Observations on the Effects of Trachelorrhaphy on Fertility and Parturition," and comes to the conclusion "that repair of lacerations of the cervix uteri is usually followed by sterility." Now, there is no doubt of the truth of this statement so far as it goes, but I think he ought rather to have said that, in those cases in which sterility followed the operation, that condition also preceded the repair of the cervix in the majority of instances, either as a result of the laceration itself, or of its effects on the uterus and its appendages; and that the operation was not the cause of the sterility, but that it simply failed to cure it.

The only way to arrive at anything like a correct conclusion on this subject is to take a number of cases (it need not be large) and analyze them, and this I purpose doing with mine.

Of the twenty-seven patients upon whom I have done the operation, six were either widows, or had reached or passed the menopause, and must therefore be excluded from the analysis. This leaves twenty-one cases to be reported upon in this inquiry. Of the twenty-one patients, thirteen had been sterile from five to sixteen years previous to the operation, and I think, for reasons which I will give farther on, that they ought also to be classed as beyond the probability of becoming pregnant. In the remaining eight cases, pregnancy had occurred within five years, but had resulted in abortion in five. In twelve of the twenty-one cases, from one to five abortions had occurred in each subsequently to the occurrence of the laceration. This gives abundant proof of the ill effects of the lesion and its results—subinvolution, chronic hypertrophy, cellulitis, oöphoritis, etc.—on fertility.

Is the assertion, that sterility usually follows as a result of the operation, correct? I do not think so; provided, of course, that the operation was properly done, that the os was not made too small, and that immediate union followed the coaptation of

the parts, so that there was left the minimum amount of cicatricial tissue to interfere with the normal resiliency of the cervix.

The oftener abortion occurs, as a rule, the greater and more persistent will be the histological changes in the uterus and its appendages, which finally result in sterility.

The majority of cases in which the operation has been done have been of long standing, because the operation is new, and there were many old cases of so-called "ulceration" with chronic hypertrophy, waiting ready to be experimented upon with this as they had been before with many other old and new remedies.

Is this last new remedy followed by any greater success than the old in the reduction of the size of a large uterine body which has become hard and fibrous from connective-tissue hyperplasia? I think not; and hence its failure to cure sterility of long standing from this cause. But, for the cure of certain cases of hypertrophy of the cervix, inflammation, ectropion, and abrasion of the mucous membrane, with their local and remote symptoms, and possibly, even probably, preventing epithelioma, and in the more recent cases for the cure of subinvolution, abortion, and sterility, the operation is an immense stride in advance of the old way of destroying the tissues of the cervix by amputation, or by the application of the hot iron or the potential cauteries. It is an advance, because it restores the cervix instead of destroying it.

The following case proves, I think, that abortion may result from laceration of the cervix, although none of the usual inflammatory consequences of the lesion are present.

CASE I.—Mrs. M. L., aged thirty, consulted me in January, 1881. She was delivered of her first child two years previously. The labor was rapid. The child was fully developed and vigorous. There was nothing unusual in the puerperal period, and she seemed to be well. Ten months after the birth of the first child she became pregnant again. Between the second and third months of gestation the product of conception was expelled with little pain, but it was followed by severe hæmorrhage. Within three months she was again pregnant, and aborted at about the same time and in the same manner as previously. This was followed within six months afterward by a third pregnancy, and abortion under similar circumstances. The last occurred about two months before she consulted me. She had absolutely no symptoms of uterine disease, such as leucorrhœa, menorrhagia, and the pain which always results from congestion and hypertrophy of the uterus; and expressed herself as feeling as well as ever she had in her life. There was no evidence whatever of syphilitic infection, either in the patient herself or in her husband. They are both robust and well developed.

Examination.—The perinæum and vagina were normal. The uterus was in normal position; it was neither congested nor enlarged; but the cervix was lacerated on the left side to a point beyond the vaginal attachment, apparently approaching and involving the fibers of the internal os. On the right side there was a mere fissure only. There was no hypertrophy, eversion, or abrasion of the mucous membrane. The sound passed to a depth of two inches and a half. I expressed the opinion that the lacerated cervix and the abortions stood in the relation of cause and effect; and I advised an operation for the restoration of the torn cervix.

On March 10, 1881, I denuded the surfaces, being careful to remove very little tissue, and to freshen the edges as far up toward the internal os as possible. I then placed six carbolized catgut sutures, and clamped them with shot. I used the gut suture here in preference to the silver wire, because, as the cervix was not large, and the tear principally unilateral, there

would not be much tension, and for the additional reason that I especially did not want any cutting of the tissues by the sutures, which is more apt to occur when wire is used. Another advantage of gut suture is that the line of union need not be disturbed by the removal of the stitches. On the seventh day after the operation I inspected the cervix through Sims's speculum, and found the sutures all *in situ*, though they were partially absorbed. Union was perfect. Two days afterward the shot were lying loose in the vagina. There had not been the slightest discharge from the united surfaces since the operation.

On June 3, 1881, the patient reported that she had not menstruated for seven weeks, and there was every indication that she was pregnant. A week later I was requested to visit her. I was much chagrined to find, when I arrived, that she had aborted. This was very discouraging, but I found some comfort in the character of this abortion. More pain attended the expulsion, and less hæmorrhage followed it than on the previous occasions. This I ascribed to the restoration of the symmetry of the cervix and its better retentive power.

On October 9, 1881, she reported that she was about two months pregnant, and feeling well; and on May 7, 1882, she was delivered at full term of a fully developed, healthy boy, after a perfectly normal labor of six hours' duration. Examination two months afterward revealed not the slightest laceration of the cervix. The mother and child are both well.

CASE II.—Mrs. M. R., aged twenty-one years, consulted me in May, 1878. She had been delivered eight months before of her first child; the labor, being tedious, was terminated with the aid of the forceps. The puerperal period was also tedious, and she had ever since been troubled with pain in the hypogastrie and lumbar regions, together with a profuse leucorrhœa. Coition was painful, and followed by slight hæmorrhage. She was anæmic, and had lost flesh.

Physical Exploration.—The perinæum was slightly lacerated and the vagina relaxed. The cervix uteri was pressing low down on the pelvic floor, and lacerated bilaterally, but to a greater degree on the left than on the right side. The tissues were soft from engorgement, and the mucous lining of the cervical canal greatly hypertrophied, everted, and abraded of its epithelial covering, so that it bled on the slightest touch. The uterine body was likewise congested and tender. The sound gave a measurement of less than three inches.

I treated this patient locally and constitutionally for almost a year, with marked general improvement, and, although the local condition would improve, the benefit was only temporary. On April 30, 1879, I did the operation for lacerated cervix, placing seven silver sutures. Perfect union resulted. Three months after the operation she became pregnant, and was delivered spontaneously at full term. The labor was so easy that delivery occurred before the arrival of the physician. Two months after the labor she called at my office, at my request, and I found the cervix healthy, although there was a very slight fissure on the left side. She stated that she had been well since the operation.

CASE III.—Mrs. A. B., aged thirty-four years, was sent to me in July, 1880. She had had eight children, the youngest of which was six months of age. She stated that she always menstruated during lactation, and became pregnant when her children were about eight months old. Since the birth of the last child she had had metrorrhagia every three weeks, lasting one week, and a profuse leucorrhœa for years. She complained of pain in the lumbar region, with a heavy dragging sensation in the pelvis and on the top of the head. She was emaciated, and so pale that she appeared bloodless. She had become hysterical.

Touch.—The perinæum and vagina were very much relaxed. The cervix uteri was far back, and presented a nodular surface,

the result of three deep rents in its tissue, one of them extending through the center of the anterior lip, flush with the vaginal junction. There was marked ectropion of the mucous membrane, with abrasion. The body of the uterus was anteverted, and only slightly larger than normal.

I placed this patient upon the "rest treatment" of Dr. S. Weir Mitchell (modified somewhat to suit the circumstances), in addition to the necessary local treatment. Her improvement was very marked, and, on October 10, 1880, three months after she first came under my care, I operated for the laceration, and secured immediate union.

Under the date of October 27, 1881, a year from the date of the operation, I find this note in my case-book: "Returns to-day, at my request, for examination. She has improved so much in appearance that I scarcely knew her, and she states that she has been well since a short time after the operation. The cervix is perfectly normal, and gives no evidence that an operation has been made."

I recently received from my friend, Dr. William L. Taylor, the following note concerning this lady:

"DEAR DOCTOR: In answer to your inquiry regarding Mrs. B., I will state that she was confined six weeks ago. The labor was natural, and, if it differed in any way from her former labors, it was more rapid. I examined the cervix to-day, and found the external os patulous, but no laceration."

CASE IV.—Mrs. X. was sent to me by my friend, Dr. Duffield, of McConnellsburg, Pa., in September, 1880. She was thirty-five years old, had had seven children and two abortions, the last one nine months before. She complained of pain in the lumbar region, a heavy dragging pain in the pelvis, and very difficult and painful locomotion. These symptoms had been growing in severity for several years; she also had menorrhagia and leucorrhœa.

Touch.—Cervix large, soft, and lacerated bilaterally flush with the vagina. Mucous membrane engorged, everted, and eroded. Uterus retroverted, but mobile. The sound passed three inches and a half.

On February 27, 1881, I closed the rent, placing seven sutures. Union immediate. The result on the symptoms was all that could be desired. A letter received a few days ago, in answer to one of inquiry from me, informed me that this lady was now pregnant.

Here are four cases, in which pregnancy followed the operation, out of the class of eight in which impregnation had occurred within five years previous to the restoration of the cervix. And that there will be more I feel sure, because a sufficient time has not yet elapsed since the operation was done, in some of my cases, to prove that sterility will continue.

That sterility does not result as a consequence of the operation, when the proper precautions are taken to secure immediate union and a normal-sized os, does not this analysis prove? That it will prevent a recurrence of abortion, and cure sterility of recent date, Cases I and II give undoubted evidence. That it will fail to cure sterility of long standing, for reasons given in this paper, I am convinced from my own experience. Time, however, may prove that a small percentage of this class will also be benefited in this direction.

I have selected the following case from the class of thirteen in which sterility had existed more than five years prior to the operation, as strongly typical of the point I wish to illustrate, viz., that the longer the time which has elapsed between the occurrence of the injury and its repair (pregnancy being absent during this time), the greater and more permanent will be the changes in and about the uterus, which almost necessarily result in a continuance of the sterility after the cervix has been restored.

CASE V.—Mrs. M. R., aged thirty-nine, consulted me in the fall of 1880. She had had six children, the last one thirteen years before. Her labors were all normal, so far as she knew, except the last. This was complicated by a malposition. The forceps was applied two hours before the delivery of the head, and great traction effort was necessary. The child was so injured by the forceps that it died on the third day after delivery. The patient was unable to be out of bed for nearly three months afterward, and the bloody lochia continued during two months. She had suffered from menorrhagia ever since, and recently from metrorrhagia every two weeks, at times amounting to "almost a flooding." In the intervals between the hæmorrhages she had a constant and profuse mucous leucorrhœa. She complained of a deep-seated pain in the pelvis, "sawing" in character, with pain in the sacral and lumbar regions and across the shoulders. Coition could not be tolerated, because of the pain it induced and the hæmorrhage which resulted.

Examination.—The perinæum showed an old laceration of slight extent, and within an inch of the vaginal orifice the finger came upon a large mass of tissue which filled and distended the tube. It was hard and nodular around its border, but softer and rather friable in its center; and it bled on the slightest touch. It gave me, at first, an impression of epithelioma, and I could readily detect that the cervix was bilaterally lacerated down to the vaginal attachment. The body of the uterus was hypertrophied, indurated, retroverted, and slightly fixed from contraction of the broad ligaments. Through the speculum the cervix was seen to be lacerated, as the finger had indicated, and it was seen also that the softer tissue, which occupied the space between the separated lips, was redundant mucous membrane, which seemed to have united from side to side, leaving a very small opening in the center, corresponding to the external os. This tissue was dotted all over its surface with whitish spots—Nabothian cysts. The sound passed to a depth of less than four inches, and showed the uterine cavity to be rugous—vegetations of the endometrium. I now punctured the retention cysts, and found that the redundant tissue between the torn and separated lips was riddled with them. So much hæmorrhage resulted from the scarification that, to check it, I was finally compelled to tampon the vagina. On the next day I removed the tampon, and found the mucous membrane much reduced and less congested.

I treated this lady during a number of months for the purpose of relieving symptoms and preparing the parts for an operation on the cervix. The hypertrophy and congestion of the mucous membrane of the cervix and uterine cavity were considerably reduced, the metrorrhagia and leucorrhœa diminished. The uterus became more mobile, and tenderness subsided; but the parenchyma of the cervix and body of the uterus remained sclerotic and unreduced in size.

On February 10, 1881, I closed the rent after denuding the surfaces and dissecting away a large amount of cicatricial tissue from the sides and angles. I placed eleven silver sutures. Considerable difficulty was experienced in passing the needles through the dense and tough cervix, and I broke and bent several before I succeeded in placing all the stitches. The surfaces did not unite as readily in this instance as is desirable, but union was finally established by granulation, resulting in the formation of a good cervix.

This patient has been entirely relieved of the leucorrhœa and pain of which she complained, but she still has an occasional menorrhagia, and the body of the uterus remains large and hard, the sound entering three inches and a half. As was to be expected under these circumstances, she has remained sterile, but certainly not as a result of the operation.

Dr. Murphy further says: "I fear I shall never arrive at

that perfection where it will be given me to appreciate why a laceration of the cervix, by being repaired, will probably prevent cancer of the womb."

I do not wish to discuss this subject here, as I am preparing a special paper upon it, but I would like to say that, if we believe that cancer may develop in consequence of the changes in the circulation and nutrition, which necessarily follow when the cervix is torn—and it seems to me that one need not have arrived at perfection in the art of appreciation to believe that cancer might develop in a field such as was presented in Case IV previous to the operation—then restoration of the organ ought to prevent cancer.

He also concludes "that the character of the labor is unusually severe and protracted, and that, in a large percentage, laceration occurs a second time."

That this statement is too sweeping is abundantly proved by the cases I here record. I can believe, where pregnancy has happily followed the operation in a case of long standing, in which the cervix is sclerotic from connective-tissue hyperplasia, and cicatricial from non-occurrence of immediate union, that the first stage of labor might be tedious, and that relaceration might take place. But, suppose relaceration does occur in some cases, is that sufficient reason to deprive the patient of the benefits which usually accrue from the operation independent of pregnancy?

Not long ago I did the operation for the restoration of a laceration of the perinæum, which extended fully an inch and a half up the recto-vaginal septum, on the person of a lady fifty-one years of age. The laceration occurred twenty-six years before with a severe forceps labor. She had been debarred from the society of her friends, and made loathsome to her husband as well as to herself all these best years of her life. In answer to my inquiry why she had not sought relief long before, she replied that she had done so, but that she had been advised to wait until after the menopause, for fear that, in the event of another parturition, the parts would relacerate! Comment on such argument as that is unnecessary.

The comfort which this lady has enjoyed since the rectum and perinæum have been restored causes her to feel far from kindly toward the gentlemen who advised such conservatism.

I have recently delivered two ladies on whom the operation for lacerated perinæum was done about three years ago, one by Dr. Goodell, and the other by myself. Relaceration did not occur in either.

(To be concluded.)

Reports on the Progress of Medicine.

OPHTHALMOLOGY AND OTOTOLOGY.

By CHARLES STEDMAN BULL, M. D.,

LECTURER ON OPHTHALMOLOGY AND OTOTOLOGY IN THE BELLEVUE HOSPITAL MEDICAL COLLEGE; SURGEON TO THE NEW YORK EYE AND EAR INFIRMARY; OPHTHALMIC SURGEON TO ST. MARY'S FREE HOSPITAL FOR CHILDREN, AND TO THE NURSERY AND CHILD'S HOSPITAL.

OPHTHALMOLOGY.

(Concluded from page 25.)

INTRAOCULAR TENSION IN THE WHITES, HALF-BREEDS, NEGROES, AND NATIVE INDIANS OF SOUTH AMERICA.—Moura-Brazil ("Annales d'oculistique," March-April, 1883) presents a preliminary note of his investigations into this subject. In the black race, the hydrostatic pressure of the eyeball, in the physiological state, is greater than in the half-breeds, and still greater

than in the white race. In the latter, the first degree of glaucomatous tension, in general, corresponds to the physiological tension in the negro race. Thus, when the increased tension ($T + 1$) is from 10 to 15 per cent. in the white race, it is from 45 to 60 per cent. among half-breeds, and from 45 to 90 per cent. among blacks. The observations upon Indians were confined exclusively to persons under thirty-five years of age, who were all hypermetropic. One of the striking facts developed in these observations was the greater extent of the visual field for colors, especially for green, in these same individuals. The field for green often coincided with the field for red. The excess of tension here spoken of is, up to a certain point, compatible with functional integrity; but none the less should it be considered as a predisposition to glaucoma, or even as being the prodromal period, which may be prolonged more or less, according to age and race, without it being possible to establish a line of demarkation between this stage and a true glaucomatous one.

ON THE VALUE OF EYE SYMPTOMS IN THE LOCALIZATION OF CEREBRAL DISEASE.—Nettleship ("British Medical Journal," Dec. 2, 1882), in a paper read before the Ophthalmological Section of the British Medical Association, offers some interesting points for general discussion. Under the head of visual and oculo-sensory disturbances he states that double optic neuritis very seldom helps us to decide where a brain lesion is. The occurrence of optic neuritis with meningitis points to the meningitis being basal; it is rare in meningitis of the convexity. Unioocular papillitis sometimes occurs in cases of coarse brain disease, and has some localizing value, generally coming on, so far as recorded cases tell, in the eye opposite to the lesion. It is of importance that all cases should be carefully observed and recorded; and it would be well to include, as possibly bearing on the subject, cases in which the papillitis, though eventually double, takes place in one eye long before, or much more severely than, in the other; also cases of double and equal papillitis, where sight is much more affected in one eye than in the other. In the present state of knowledge it would be seen, from what has been said, that papillitis, with other symptoms of brain disease, tells us something of the seat of the brain lesion if it be single, if the second eye do not suffer until after a considerable interval, or if papillitis in one eye be accompanied by failure of sight without immediate change in the disc of the other. Nettleship believes that atrophy following pressure on the chiasm, whether by tumor or by fluid distension of the third ventricle, presents nothing pathognomonic either in its course or appearance. It is certainly possible in some, though by no means in all, cases of atrophy not preceded by papillitis, to distinguish between spinal atrophy, where the disc is often opaque and grayish, and the lamina cribrosa concealed, and atrophy secondary to injury, pressure, or destructive inflammation far above the eye, in which the lamina cribrosa is often exposed, the disc somewhat cupped, and its color less gray than yellowish. But these differences are far from constant, and give no aid in localization of brain disease. Nor is it always possible to say whether atrophy has been preceded by papillitis or not. Color-blindness does not seem to occur in any constant relation, either to loss of vision or loss of visual field, in optic atrophy. Some cases have recently been recorded which seem to point to the consciousness of color depending rather on the special endowment of some part of the brain than on any differentiation of the retinal or optic neural structures. Color-blindness is nearly always very marked in optic atrophy associated with ataxy, yet it is probable that in these cases the changes begin at the ocular end of the nerve. Failure of color-perception, in its bearing on cerebral localization, needs further study.

In regard to those cases of pseudo-glioma with brain symptoms in children, it is very desirable to know what changes, if

any, occur within the skull. If meningitis occur, is there anything unusual in its seat or nature, and why does the child show this peculiar eye disease instead of suffering from double optic neuritis? The questions of pyæmia and of cerebral thrombosis have also to be considered in connection with such cases.

In regard to temporal hemianopia, the symptom has in rare cases been proved to be due to tumor at the anterior part of the chiasm. The fact that homonymous hemianopia occurs from destructive lesion of one optic tract demonstrates the semi-decussation of the optic nerves at the chiasm in man. Several cases in which the lesion has involved the region of the corpora geniculata and the posterior part of the optic thalamus are also on record. It has been shown further, in several cases, that lesions of the cortical or subcortical structures in the region of the angular gyrus and occipital lobe may produce homonymous hemianopia. Ferrier suggests that in tract hemianopia the loss of field may be expected to come quite to the fixation point, while in cerebral hemianopia it may be expected to stop short of the fixation-point by several degrees, leaving thus a small area of central vision perfect.

In homonymous hemianopia it is not uncommon to find also some peripheral restriction of the remaining half of each field; this may be greater in one eye than in the other, but it does not seem that the eye with the greater restriction always bears the same relation to the lesion. The hemianopic loss of field, moreover, is by no means always equal in the two eyes; and this inequality, like the peripheral limitation mentioned, does not seem to stand in any constant relation to the site of the lesion. The rarity of decided atrophic changes at the optic discs, in cases of homogeneous hemianopia, even of long standing, points strongly against the tract being the seat of the lesion. Pathological evidence is beginning to accumulate in favor of a cortical visual center, and of its being seated in or about the occipital lobe. Nettleship considers it very important, in reference to localization, to note the state of the pupils in all cases of damage or loss of sight from brain disease. Loss of reflex pupillary action indicates damage not higher up than the corpora quadrigemina, while blindness with active pupils points to disease in the cortex or subcortical structures.

OPHTHALMOMETRIC RESEARCHES ON THE ASTIGMATISM OF THE CORNEA IN SCHOLARS FROM SEVEN TO TWENTY YEARS OF AGE.—Nordenson ("Annales d'oculistique," March-April, 1883) has made a careful study of this subject, his report being illustrated by numerous tables. He formulates his conclusions as follows: 1. In eyes free from astigmatism the radius of curvature of the cornea is the same for both eyes; the difference is not generally measurable; and this is in accord with the writings of Donders, Mauthner, and others. 2. In children who are free from astigmatism, the visual acuity is, as a general rule, greater than the normal by one and a half time. 3. In emmetropes, nine out of ten present a measurable amount of astigmatism. The proportion of astigmatic persons is greater among hypermetropes, and still greater among myopes. 4. Among the whole number of children (two hundred and twenty-six), sixty-nine had an astigmatism of at least one dioptric in one eye, which Nordenson thinks is sufficient to bring to the notice of the relations of the children, so that the children might be sent at once to an oculist as soon as symptoms of myopia and asthenopia manifested themselves. 5. Four of the two hundred and twenty-six children had an astigmatism greater than D. 1.50, and should be provided with spectacles at once. 6. The normal acuity of vision is compatible with a corneal astigmatism of at least a dioptric and a half (D. 1.50). 7. As a general rule in young people, the crystalline lens plays a part in the correction of astigmatism. 8. These observations seem to confirm the statement of Javal that astigmatism predisposes to myopia. Among the

nine scholars that were free from astigmatism, there was not a single myope; while among the thirty-two myopes none were free from astigmatism, and two thirds of them had an astigmatism of at least half a dioptric (D. 0.50).

ABSCISS OF THE FRONTAL SINUS; CURE.—Notta ("Rec. d'ophthal.," March, 1883) reports a case of this nature in a woman aged sixty-four. She was first seen on November 1, 1882, having applied for surgical interference for a small tumor at the inner angle of one eye. She had been subject to catarrhal colds in the head for fifteen years, and of late the discharge from the pituitary membrane had had a fetid odor. She had occasional pain in the forehead, especially just over the left eye. On examination, a tumor was seen, just above the inner canthus of the left eye, as large as a pigeon's egg. Pressure on this tumor caused it to disappear, while a stream of fetid and greenish pus flowed either from the left nostril anteriorly, or from the posterior nares into the mouth. An examination of the supra-orbital arch on the left side shows a depression at the site of the tumor, due to the absorption of the anterior wall of the frontal sinus. An incision about fifteen mm. long was made parallel to the orbital margin and just above it, and the internal wall of the frontal sinus was scraped with a rasp. The cavity was then stuffed with charpie with a solution of zinc chloride, and over this was placed a carbolized dressing. At the end of two days the charpie was removed, and twice a day the cavity was injected with carbolized solutions. By the last of December the wound had completely closed.

TWO NEW CASES OF CAVERNOUS ANGIOMATA OF THE ORBIT, WITH REMARKS.—Panas ("Archives d'ophtalmologie," Jan.-Feb., 1883) reports two cases of cavernous angiomata of the orbit, one in a young woman of twenty-three, and another in a boy of ten. The first case corroborated the views held of the intramuscular seat of the tumor in the funnel formed by the recti muscles. In this case it was rendered indubitable by the abnormal insertion of the ocular muscles on the surface of the tumor. The eyeball was pushed away, and disorganized by the tumor insinuating itself between the globe and the muscles and closely surrounding the former. The frequent coexistence of a simple periorbital angioma with angioma of the orbit is also confirmed by both cases. The presence of pigmentary elements, mentioned by Horner, is also confirmed by the first case.

PARALYSIS OF THE ASSOCIATED MOVEMENTS OF THE EYES.—Parinaud ("Archives de neurologie," v, 14, March, 1883) in his paper has studied the paralyses of: 1. Horizontal parallel movements; 2. Vertical parallel movements; 3. Movements of convergence; 4. Movements of divergence. He finds that associated paralyses are frequent in disseminate sclerosis of the brain substance and spinal cord, but that they are usually incomplete. One reason why they are easily overlooked is that diplopia is very often absent, and that it hardly ever exists when the paralysis is old. In disseminate sclerosis, conjugate paralysis is almost always accompanied by nystagmus. In the majority of cases the latter, even when connected with infantile amblyopia, is caused by a lesion of the nuclei of the gray substance which preside over binocular associated movements. Hence it is not surprising that the nystagmus coincides with paralysis of these movements. When the lateral conjugate paralysis is slight, its diagnosis is sometimes difficult. The diplopia is not characteristic, and the ocular movements are sometimes but very slightly modified. When nystagmus is present, the oscillations have no very great significance when they are developed in the line of action of the paralyzed muscles; but, when they exist in the contrary direction, they are of greater significance. The presence of a hemiparesis of the muscles of the opposite side, and especially of an alternate paralysis of the face and limbs, would call attention to the conjugate paralysis.

The paralysis of parallel vertical movements is not so complex as would at first appear. If it were confined to one eye, it might be explained by a partial lesion of the nucleus of the third pair, involving all the muscles of the eye innervated by this nerve, except the levator palpebræ and the iris. According to the observations of Hensen and Volkers, this lesion should be in the posterior part of the nucleus, near the superior angle of the fourth ventricle. The absence of paralysis of the internal rectus for lateral movements is explained by the existence of the filament sent from the nucleus of the sixth nerve to this muscle; and in this fact is found the confirmation of the double innervation of the internal rectus (sixth pair for lateral or external motion, third pair for movements of convergence).

The paralysis of movements of divergence is essentially characterized by a slight homonymous diplopia, existing in all directions, without notable modification of the separation of the double images for a corresponding distance. The persistence of the diplopia in all parts of the visual field, and especially in its upper part, and the absence of obliquity of the double images, ought to prevent a diagnosis of paralysis of the fourth nerve, although the error is frequently made. In considering its ætiology, we should include among the causes a lesion of the two nuclei of the sixth pair. This form of diplopia seems to be habitually connected with a condition of vertigo. Recent works seem to render almost certain the existence of a special nerve, called the *nerve of space*, annexed to the auditory nerve, lesion of which produces the vertigo of Ménière. Our ideas of space are gained not only by hearing, but also, and especially, by sight. We acquire the idea of a third dimension, to which that of space is closely allied, by the movements of convergence of the eyes. These considerations of physiological order favor the existence of a center of co-ordination of the movements of the eyes for convergence of the axes, located in the cerebellum.

ERECTILE TUMOR OF THE EYELIDS.—Richet ("Rec. d'ophthal.," Jan., 1883) reports a case of this kind in a child eight months old. The tumor was as large as a filbert, and occupied two thirds of the upper lid, extending as far as the oculo-palpebral furrow. It involved both skin and mucous membrane. It increased in size when ever the child cried. It diminished under pressure of the fingers, but increased in size as soon as the pressure was relieved. Richet determined to treat the case by coagulating injections of the perchloride of iron, using an absolutely neutral solution and diluted seven or eight degrees, in order to produce simple coagulation. There is no record of the ultimate result.

THE TREATMENT OF TRACHOMA OF THE CONJUNCTIVA.—Unterharnscheidt ("Klin. Monatsbl. f. Augenheilk.," Feb. 1883), in looking round for some means of relieving, if not of curing, cases of chronic conjunctival trachoma, after having run through the entire armamentarium of the ophthalmic surgeon, has, in a sort of despair, sought relief in the galvano-caustic method for those cases of papillary granular proliferations. He thinks the danger of infection by this operation is much less than by the use of the sharp spoon or knife, for with the loss of substance a slough is also simultaneously produced, which completely covers the loss of substance and protects it from external noxious agencies. The application of the heated plate is easy, causes but trifling and momentary pain, and renders anæsthesia unnecessary. The agent acts rapidly, and destroys more surely than any other method the micrococci, which have been demonstrated to exist in trachomatous conjunctiva, and which by contact will produce trachoma in a healthy conjunctiva. Unterharnscheidt has hitherto used the cautery only upon the conjunctiva of the upper lid.

FOUR CASES OF DERMOID TUMOR OF THE EYE.—Vassaux ("Archives d'ophtalmologie," Jan.-Feb., 1883) reports four

cases of dermoid tumor in the region of the conjunctivo-corneal limbus, and, from an examination, draws the following conclusions: 1. The dermoid tumor has all the histological characteristics of true skin. 2. A dermoid tumor is produced by an invagination of the eyelid at some point of the conjunctiva, ocular or palpebral. 3. The cause of this invagination is a preliminary and temporary adhesion between the amnion and the ocular vesicle.

MYXO-FIBROMA OF THE OPTIC NERVE.—Véron ("Rec. d'ophtal.," Jan., 1883) reports a case of this nature in a young man of eighteen years, which had existed for three years. The eye was protruded for about three quarters of its antero-posterior diameter from the orbit, and the eyelids were widely distended. The exophthalmus was outward as well as forward, and the motility of the eye was limited, especially inward and upward. The media were clear, the pupil sensitive. There was a high degree of hypermetropia, and atrophy of the optic disc. On examining the orbit, a tumor could be felt deep under the supraciliary border, which seemed to be cylindrical and to surround the optic nerve. It was resistant, smooth, movable with the eyeball, and not adherent to the orbital walls. There was neither bruit nor pulsation. The eyeball and tumor were enucleated together, and an examination confirmed the diagnosis as to its being a tumor of the optic nerve. Its nature proved to be myxo-fibromatous.

NEURASTHENIC ASTHENOPIC AND SO-CALLED ANÆSTHESIA RETINÆ.—Wilbrand (Archiv. für Augenheilkunde," xii, 2) in this paper proposes to show: 1. That in neurasthenic patients, in addition to asthenopic troubles, there will also be found all the grades or varieties of signs pointing to so-called retinal anæsthesia. 2. That these appearances in the nervous apparatus of vision may all be explained in the same way as the great number of all the other analogous symptoms in other parts of the body of the same patient. 3. That, consequently, it is perfectly untenable and troublesome for the comprehension of the so-called retinal anæsthesia to regard it as a pathological appearance existing in and alone for itself.

A RARE CASE OF UNILATERAL RETINITIS ALBUMINURICA OBSERVED IN A PATIENT WITH BUT ONE KIDNEY, SITUATED ON THE CORRESPONDING SIDE, AND THE SEAT OF PARENCHYMATOUS NEPHRITIS.—Yvert ("Rec. d'ophtal.," March, 1883) reports the following rare case in a Spaniard, aged forty-three, who had had most of the subjective and objective symptoms of parenchymatous nephritis, and in whom the right eye remained absolutely intact throughout the entire course of the disease. In the left eye there were the usual yellowish-white masses of exudation in the retina, beneath the vessels in the region of the macula, and between the latter and the disc. There were numerous punctate hæmorrhages, and some larger extravasations. Vision was not much affected when the patient first came under observation, but subsequently was almost entirely lost. After he had been under treatment about six weeks, the vision improved almost to the normal standard, and there was a considerable diminution of the retinal exudation. He subsequently, however, grew very much worse, the vision was again nearly lost, and the patient died in about ten weeks from the time that he first came under observation. At the autopsy the right kidney was found to be entirely absent, there being not a trace of kidney, artery, vein, or ureter, though the supra-renal capsule was present in its accustomed place, and was of normal size. The place ordinarily filled by the kidney was occupied by a portion of the right lobe of the liver, enormously hypertrophied. The left kidney was in its normal position, was considerably hypertrophied, and presented the characteristics of the large, white, parenchymatous nephritis.

OTOLOGY.

RESULTS OF THE DIVISION OF THE ACOUSTIC NERVE, WITH A DISCUSSION OF THE SIGNIFICANCE OF THE SEMICIRCULAR CANALS FOR THE BODILY EQUILIBRIUM.—Bechterew ("Archiv. für die gesammte Physiologie," xxx, 7 and 8) publishes the results of his investigations upon the above subject in a long and interesting article. He draws the following conclusions: 1. Unilateral division of the acoustic nerve in dogs produces forced movements in the form of revolutions round the longitudinal axis of the body toward the operated side, with the same character and peculiarities (deviation of the eyes, nystagmus, rotation of the head and trunk, etc.) as occur with unilateral destruction of the olivary bodies, or injury of the central gray matter in the postero-lateral part of the third ventricle, or by division of the cerebellar peduncles. 2. These forced movements of rotation appearing after division of the acoustic nerve, as in all other cases, are maintained almost uninterruptedly only for a limited time immediately after the operation; later they appear paroxysmally, the paroxysms being interrupted by periods of rest, during which the animal lies in a forced position on the side corresponding to the lesion. In time the rotatory movements cease, being replaced by circular movements, generally toward the operated side, which are accompanied by distinct disturbances of equilibrium, which are manifested by the continual tendency of the animal to fall toward the side of the lesion. 3. All these symptoms must be regarded as reflex, since they are also met with in animals in which the cerebral hemispheres have either been destroyed, or have been rendered functionally incapable by narcosis. 4. There is, however, no doubt that the presence and the unimpaired condition of the cerebral hemispheres exert a certain influence upon the symptoms occurring after division of the acoustic nerve, since the involuntary movements are thus increased and excited. Only in this way can be explained the perceptible diminution of the characteristic movements of the animals after destruction of the cerebral hemispheres. 5. In the higher animals a simple destruction or removal of the frontal or parietal lobe for a considerable extent suffices to attain the desired effect. 6. After bilateral division of the acoustic nerves the animals show great disturbances of equilibrium, which are seen in the absolute inability to walk or stand, with entire absence of paralysis of the extremities. 7. The symptoms which appear after division of the acoustic or destruction of the semicircular canals are directly connected with each other, as from the loss of function of the operated canals, as also by the uninterrupted normal irritation of the uninjured canals, which continue to give rise to certain impressions, and to transfer these by reflex action to the motor tracts. The lack of harmony thereby resulting in the impressions proceeding from the destroyed and the uninjured canals extends to the centers of consciousness, and produces there a powerful reaction in the form of a feeling of vertigo, which acts in a manner to increase the motor disturbances, and is probably one of the important factors in exciting the involuntary movements. 8. This view can also be extended to the origin of those disturbances of motility which appear after injury of one of the three peripheral organs which are connected with the maintenance of the equilibrium—the semicircular canals, the central gray matter of the third ventricle, and the olivary bodies of the medulla oblongata. 9. Goltz's hypothesis in regard to the variations in pressure of the endolymph explains sufficiently the functional exercise of the canals as a peripheral organ, which is directly connected with the maintenance of equilibrium, although it as yet needs positive demonstration. 10. The semicircular canals are organs which not only aid in maintaining the equilibration of the head, but of the entire body. At the same

time they stand in very close functional connection with the function of the ear. 11. The influence of sound impressions upon the movements and the condition of equilibration of the body is probably exerted through the medium of the semicircular canals.

PEDUNCULATED BONY GROWTH IN THE EXTERNAL AUDITORY CANAL, THE RESULT OF LONG-CONTINUED SUPPURATION: REMOVAL BY SNARE; MICROSCOPIC EXAMINATION.—Cocks and Minor ("Arch. of Otolaryngology," xii, 1) report a case of this nature in a man, aged twenty-eight, following an otorrhœa of twelve years' duration. Two bony tumors were removed by the snare. The larger one was an irregular cylindrical mass, with a convex upper surface of comparative smoothness, an irregular, nodulated under surface, a rounded outer extremity, and a smooth articular concavity on its inner end. It measured 15 mm. long, 10 mm. wide, and 7 mm. thick. The smaller tumor was an irregular prismatic mass, on the outer surface of which was a smooth, convex articular surface, corresponding to the concavity of the larger bone. It measured, transversely, 6.5 mm.; longitudinally, 3.5 mm.; vertically, 4.5 mm. Both tumors were hard, and covered by a dense periosteum, which adhered closely to the smooth surface. The entire mass consisted of perfectly formed bone-tissue with beautifully marked Haversian systems. These osteomata undoubtedly arose from masses of granulation tissue, associated with inflammation of the middle ear. Osteoblasts from denuded bone, falling upon granulations, found a nidus for growth and reproduction. Minor offers, in explanation of the separate bones with articulating surfaces, the theory of the ossification of two contiguous granulation masses, motion between which was furnished by the movements of the canal, incident upon motion at the temporo-maxillary articulation.

THE INFLUENCE EXERTED BY THE TREATMENT OF ONE EAR UPON THE OTHER EAR.—Eitelberg ("Zeitschrift für Ohrenheilkunde," xii, 2 and 3) formulates his conclusions upon the above subject as follows: 1. In many cases the treatment of one ear causes an improvement in the hearing power of the other ear, which has not been treated, while a diminution of the hearing power is very rarely produced. 2. The greatest difference in favor of the improvement of hearing in the ear not treated occurred in cases of one-sided acute or chronic otitis media purulenta, with defective hearing in the other side. 3. In disease of both ears, when only one ear was treated, an improvement very often appeared in the other ear, not only in respect of the hearing power, but also in respect of the existing subjective noises. 4. In many cases an improvement, and even complete restoration, of the hearing power appeared in the ear not treated, not immediately upon the treatment of the other ear, but some time after. 5. In some cases, after a certain time had elapsed, the improvement in the hearing subsided and the ear returned to its former condition.

THE EXAMINATION OF EARS BY MEANS OF THE TUNING-FORK.—Emerson ("Arch. of Otolaryngology," xii, 1), after an examination of a large number of persons with normal hearing, draws the following conclusions: 1. Reliance on the statements of patients in regard to the loudness of tuning-forks, as a test in ear troubles, will lead to error, unless account is taken of the fork used. As a rule, in normal ears high notes are heard louder through aerial conduction, and low notes louder through bone-conduction. This is true also, to a limited extent, in diseased ears. 2. The relative duration of aerial and bone-conduction is a better test. In normal ears, in all cases, the tuning-fork is heard longer through air than through bone, the proportion being greater for high than low notes; and for the middle C (c) it should be heard about twice as long through air as through bone. Any marked departure from this indicates disease. 3. In external- or middle-ear disease this proportion

is reduced, and in well-marked cases, the average bone-conduction remaining the same or being increased, the aerial conduction will be reduced until it becomes equal to or much less than bone-conduction. 4. When the bone-conduction is longer than aerial conduction, and yet much less than the average duration of bone-conduction for normal ears, it is an indication not only of middle-ear trouble, but that the nervous apparatus is involved. 5. If the proportion between bone and air remain the same, and the bearing power be much lowered, it is probably an indication of disease of the internal ear. Air-conduction markedly exceeding bone-conduction, the bone-conduction may be entirely lost, and yet air-conduction continue to a limited extent.

THE ACTION OF QUININE UPON THE EAR.—Green ("Boston Med. and Surg. Jour.," March 8, 1883) has an interesting and timely paper upon the above subject, and formulates his conclusions as follows: 1. Clinical experience the world over is that quinine occasionally produces serious injury to the ears. 2. From our present knowledge, both clinical and experimental, we are justified in asserting that the action of quinine upon the ears is to produce congestion of the labyrinth and tympanum, and sometimes distinct inflammation, with permanent tissue changes. 3. The action of the drug upon the ears should always be considered in prescribing it, and changes in the ears, due to existing or previous inflammation of those organs, constitute a contraindication to the medicine in large doses or for a long time, except under urgent circumstances. 4. Where large and continuous doses are absolutely necessary, an occasional intermission of the administration is desirable, if possible, to diminish the risk to the ears.

CASE OF FRACTURE OF THE PETROUS BONE.—Jacquemart ("Ann. des mal. de l'oreille et du larynx," March, 1883) reports an interesting case of this kind occurring in a physician, from a fall from a wagon upon the left side of his body and face. There was an immediate hæmorrhage from the left auditory canal, loss of consciousness for half an hour, and vomiting. He again became unconscious for twenty-four hours. After this he gradually returned to his normal condition. There was never any loss of hearing power. About eighteen months after the accident he became conscious of a bruit and a beating in the left ear, isochronous with the pulse and heart movements. When Jacquemart saw him, three years after the accident, he recognized the following condition of affairs: On the left membrana tympani were two white points, one in front and the other behind the handle of the hammer, resembling cicatricial tissue; these were probably the points at which the membrane was injured at the time of the accident. The hearing power was intact. Speech was somewhat slow, owing to sluggish action of the tongue. On the mastoid there was recognized, under pressure, an arterial pulsation synchronous with the pulse, and with the stethoscope there was recognized a murmur, which ceased to be perceived by the patient after the pressure had been continued for some time. The wound in the tympanic membrane might have been occasioned by the direct effect of the concussion of a column of air, or by a fracture of the petrous bone extending into the cavity of the tympanum and involving the drum-head; it was probably due to the latter. Jacquemart thought that there had been an incomplete fracture of the petrous bone, a fissure of the external portion, near the union of the mastoid process with the body of the bone, involving the mastoid as far as the canal of the facial nerve behind, but extending forward across the entire auditory canal, thus tearing the drum-head. The hæmorrhage at the time of the accident came from one or more vessels of the membrana tympani. He thought that the pulsation and the bruit were of purely nervous origin.

ANATOMICAL RESEARCHES ON THE DEVIATIONS OF THE NASAL SEPTUM.—Loewenberg ("Arch. of Otolaryngology," xii, 1) has been making some investigations into the anatomy of the nose, with a view to the solution of the three following problems: 1. Where is the seat and what is the nature of the obstacles which so frequently arrest the catheter during its passage through the nose? 2. What is their rôle in this operation and in the therapeutics of the nasal fossæ? 3. How can we recognize the existence of these obstacles and avoid them in a rational and scientific manner? Anterior rhinoscopy of many cases has led the author to believe that, in the cases in which the catheter encounters an obstacle in the nasal fossæ, this is not in the turbinated bones, but in the septum; and it forms there the protuberances or spurs which he has described in a previous article in the "*Union médicale*" for July 28, 1881. Loewenberg's researches are based on the dissection of more than one hundred fresh heads, and upon an examination of many skulls in museums. In only about one case in seven was the septum found absolutely straight in all its parts. He found that the pathological deviations must be divided into several groups, which he calls vertical deviations and horizontal deviations, the latter being divided into superior and inferior horizontal deviations. Loewenberg calls the lateral deformity of the lower part of the septum the inferior horizontal deviation. It proceeds from the fact that the bony part on the one hand and the cartilaginous part on the other are not in the same vertical plane, but join under a dihedral angle projecting toward one side. In the majority of cases Loewenberg found that the inferior deviation forms the reverse of the superior deviation—that is, to say, that the convexity of the one is turned in the opposite direction to that of the other. In certain persons the arrangement is still more irregular; it is like a kind of torsion or undulation of the septum from top to bottom, by means of which the groove of the vomer and the crest of the maxillaries do not participate in the curve of the lower deviation, but deviate in their front part in the same way as the superior deviation. In the minority of cases the convexities of the two horizontal deviations face the same way. Deviations in the vertical direction are not, like the preceding, horizontal or slightly ascending projections, but folds extending from top to bottom along the septum narium in its front part, consequently pertaining especially to the cartilage of the septum. These folds present a convexity toward one side, and a concavity toward the other. To facilitate catheterization under these circumstances, the point is to get round the obstacle and not to remove it. The author rejects any bloody operation, such as the ablation of the deviated portion of the septum. The obstacle may be avoided by catheterization through the opposite nostril in cases where protuberances do not exist on both sides of the septum. But the method which the author prefers is catheterization guided by simultaneous anterior rhinoscopy. He lays down the very important principle, which every experienced aurist will recognize and indorse, that, in every case requiring our attention for an affection of the ear, the nasal fossæ should always be carefully explored, unless the disease be manifestly confined to the external ear or to the auditory meatus. He has devised a speculum for this special purpose, which consists of a metallic tube, shaped like a truncated cone, at the large end of which a sort of handle or palette is implanted almost perpendicularly to the axis of the cone. A rather wide slit extends the length of the speculum on the side opposite that which holds the palette. The instrument, having thin sides, is much lighter than ordinary specula, and its contact with the catheter would not displace the latter in so painful a manner to the patient as the ordinary heavy and cumbersome instruments do. After having introduced this speculum into the entrance of the nasal fossa, the palette being above,

it is held there by slightly pressing the latter with the thumb of the left hand, the fingers of which are placed against the back of the nose. The slit is in this way directed downward and horizontally, so as to leave the passage free for the introduction of the catheter. When the catheter has passed the narrowed part, the speculum is taken off by turning the slit upward; it then drops off of itself, the slit making room for the stem of the catheter.

A NEW THEORY AS TO THE FUNCTIONS OF THE SEMICIRCULAR CANALS.—McBride ("Jour. of Anat. and Phys.," Jan., 1883) thinks that the explanation hitherto advanced as to the functions of the semicircular canals, though probably correct as far as it goes, is quite inadequate to account for all the facts connected with their physiology. If the canals were concerned in equilibration alone, then, on general principles, it is fair to assume that they would be placed in a position as safe as is consistent with the proper fulfillment of their function. The function of equilibration could probably be carried on just as well if they were altogether shut off from the auditory apparatus. McBride, therefore, assumes that they have another part to play in the animal economy. It seems probable that this other function is to produce, through the ampullar nerves, reflex rotation of the head and eyes toward the point from which a sound proceeds, and that, further, the afferent impulse may, in the lower animals co-ordinate and brace the muscles necessary for escaping from a danger of which sound is the first indication. The most probable explanation of the exposed condition of the semicircular canals is that, while sonorous vibrations are conveyed by the cochlear nerve to the true auditory center, an afferent impulse is at the same time sent to various motor centers through the ampullar nerves.

DISEASE OF THE EAR OCCURRING DURING THE COURSE OF PAROTITIS.—Roosa ("Arch. of Otolaryngology," xii, 1) gives an analysis of ten cases carefully reported, and draws the following conclusions: 1. An acute catarrh of the middle ear may occur during the course of mumps, and be attended by fever and vomiting. 2. This catarrh may extend from the parotid gland through the auditory canal and outer layer of the drum-head, or through the mastoid process. 3. An affection of the labyrinth may occur simultaneously, or by extension from the middle ear. 4. It is probable that there are cases where the disease is transferred to the labyrinth in the same manner that an inflammation sometimes occurs in the testes and the breasts during the course of mumps, but this can not be considered as proved until more detailed experience is furnished of cases observed a few hours after the impairment of hearing occurs. The cases which Roosa has seen have convinced him that any hope of retaining the hearing power must depend upon the prompt use of local antiphlogistic means. If the labyrinth is invaded, it is doubtful if the cases are not incurable, even if seen at the instant the hearing becomes affected.

THE FILIFORM FUNGI ASPERGILLUS FLAVUS, NIGER, AND FUMIGATUS; EUROTIUM REPENS AND ASPERGILLUS GLAUCUS, AND THEIR RELATION TO OTOMYCOSES ASPERGILLINA.—Siebenmann ("Zeitschrift für Ohrenheilkunde," xii, 2 and 3) writes at considerable length of the various forms of mycosis aspergillina of the human ear, with their history, symptoms, pathogeny and pathology, prognosis and treatment, but this paper contains very little that has not been said before. His conclusions are that in the human ear aspergillus is very rarely located as a membrane upon the epidermis; and, when it is met with here, it is always of the "fumigatus" variety. Aspergillus niger and flavus is always situated upon the surface of the free rete or upon the corium, without, however, penetrating into the latter. Hence the mycelia of the deeper thallus layers may be surrounded and overgrown by the cells of the rete Malpighii.

Letters to the Editor.

THE PLEDGE EXACTED AT CLEVELAND.

NEW YORK, July 3, 1883.

To the Editor of the New York Medical Journal:

SIR: In my last I was, perhaps, somewhat severe upon the American Medical Association for its choice of its presiding officer, but I am glad that, in one respect at least, I can heartily commend its action.

I refer to the pledge, exacted of all those admitted to a share in its deliberations, that they would defend its code of ethics, without change or amendment. I am convinced that nothing which the association could have done would have shown so clearly the rock of conservatism upon which it stands, and the dignity of its position. Numbers who, after traveling perhaps hundreds of miles, found the door shut in their faces until they should signify their loyalty to its time-honored policy, will learn therefrom a lesson of respect for the power they attempted to ignore.

Dr. Squibbs has shown that, in Brooklyn at least, the irregular "legal practitioners" are about equal in number to the regular. They were only a handful when we "drew the line" thirty or forty years ago. That they should have increased in such startling measure shows but too plainly how lax we have been in our repressive action. More of the spirit shown at Cleveland would have cowed them, and prevented the growth of the heresy which it is even now not too late to crush out. Stronger measures are the need of the hour, and, in inaugurating them, the association has taken a step in the right direction, which all but the fanatics of "progress" will applaud.

Yours sincerely,

BOURBON.

Miscellany.

THE TRI-STATE MEDICAL ASSOCIATION.—The ninth annual meeting will be held in Indianapolis, September 18th, 19th, and 20th. The work is already far advanced, and the title of each paper should be sent in at once. The reading of each paper must not exceed twenty-five minutes. It is also the rule that each physician who registers must be a member of a local or State society in good repute. All such are invited. Notice of papers or cases to be presented may be sent to the chairman of the committee on programme, Dr. J. L. Thompson, Indianapolis, to the secretary, Dr. G. W. Burton, Mitchell, Ind., or to the president, Dr. William Porter, St. Louis.

THE WATER-CRESS AS A DRUG AND AS AN ARTICLE OF FOOD.—At a recent meeting of the Paris *Société de thérapeutique* (Gaz. hebdom. de méd. et de chir.) a note was read from M. Grellety relative to the dietetic and therapeutic qualities of the water-cress. The author maintained that the cress was not so wholesome as was commonly supposed, but that it was difficult of digestion, and that, containing a sulpho-nitrogenous essential oil with allyl for its base, together with a bitter extractive, iodine, iron, and phosphorus, it might *a priori* be accounted an irritant.

These views do not seem to have met with much favor at the meeting, judging from the discussion that followed, in which M. Gueneau de Mussy, M. Constantin Paul, M. Dujardin-Beaumetz, and several other gentlemen took part. The idea was accepted that the stems of the cress were perhaps difficult of digestion, and it was conceded that the plant ought always to be washed very thoroughly before being served, although no weight was allowed to the popular notion that the cress was rendered irritating and noxious by the accident of a frog's having sprawled upon it.

Considered as a drug, several gentlemen testified to the beneficial action of the cress in certain chronic diseases, especially obstinate eczema and diabetes. The official syrup was regarded as a bad preparation, due, it was thought, to its being clarified with the aid of heat, the effect of which was to give it a disagreeable sulphurous odor. The

fresh juice, squeezed out with a little press, was recommended by M. Gueneau de Mussy; it left something of an acid taste in the mouth, but this was readily allayed by a little syrup of bitter orange-peel.

CONTUSIONS OF THE BRAIN AND SPINAL CORD.—Dr. John A. Lidell, late surgeon to Bellevue Hospital, New York, in an elaborate practical paper on this subject in the July number of the "American Journal of the Medical Sciences," discusses the clinical history, diagnosis, prognosis, and treatment of this large and very important class of injuries. While much is said in our text-books on the subject of cerebral concussion—of its dangers and of its importance—but small if any mention is made of the contusions of the brain which so very often complicate the concussions, and impart to them whatever of gravity, be it much or little, that they may chance to possess. And still less mention is made of the contusions of the spinal cord. No wonder, then, that bruises of the brain-structure and of the spinal-cord substance occur much more frequently than is generally supposed, that the relationship which exists between these injuries and concussions is not well understood, and that the bruises of these organs often escape even all suspicion during life. That slight or even moderate concussions of the brain sometimes, perhaps not unfrequently, occur without being complicated with contusions of the brain, Dr. Lidell does not doubt. Contusion of the brain is, therefore, he believes, not synonymous with concussion of the brain; but, at the same time, all the evidence now collected tends to prove that the severe instances of cerebral concussion are always complicated with cerebral contusion. Contusion of the brain, however, derives its chief importance from the fact that it is very often associated with contusion of the brain; and, in examining a case of cerebral concussion, the question of most importance for the surgeon to decide is whether or not cerebral contusion is also present. These are points of doctrine which practically have much interest for patients as well as practitioners, because of the influence they are likely to exert in the direction of procuring a correct diagnosis and, consequently, a wise treatment; for, in the disorders of no other parts of the body is it more true that an accurate diagnosis begets a wise plan of treatment than in those of the brain and spinal cord.

POWDERED MEAT IN THE TREATMENT OF PHTHISIS.—M. Debove ("Gaz. hebdom. de méd. et de chir.") employs the following method of rendering his *poudre de viande* palatable: Two soup-spoonfuls of the powder are stirred with cold water in a bowl until the meat seems to be thoroughly dissolved. Two spoonfuls of syrup and an equal amount of some liqueur are then added—curaçao, chartreuse, or kirsch, for example. M. Dujardin-Beaumetz reports that, with this preparation, given in quantities of six spoonfuls of the powder daily, remarkable results have been produced in the treatment of consumptives.

ARMY INTELLIGENCE.—*Official List of Changes of Officers of the Medical Department, United States Army, from June 30, 1883, to July 7, 1883.*—HEGER, A., Major and Surgeon. Relieved from the further operation of paragraph 9, S. O. 55, C. S., Department of Texas, and will return to his station, Fort Clark, Texas. Par. 2, S. O. 69, Department of Texas, June 25, 1883. — HAVARD, VALERY, Captain and Assistant Surgeon. Assigned to duty with expedition to complete the survey of the country west of the Rio Pecos, Texas. Par. 8, S. O. 63, Department of Texas, June 22, 1883. — RAYMOND, HENRY I., First Lieutenant and Assistant Surgeon. Granted leave of absence from July 14, 1883, to September 1, 1883, with permission to go beyond sea, and resignation accepted, to take effect September 1, 1883. S. O. 150, A. G. O., June 30, 1883.

NAVAL INTELLIGENCE.—*Official List of Changes in the Medical Corps of the Navy for the week ending July 7, 1883.*—Medical Inspector A. C. Rhoades detached from the Naval Academy, Annapolis, Md., and ordered to the United States steamship Tennessee, and as Fleet Surgeon of the North Atlantic Station, *vice* Medical Inspector T. W. Leach, detached and placed on sick leave.

SOCIETY MEETINGS FOR THE COMING WEEK.—*Tuesday, July 17th:* American Otological Society (Catskill, N. Y.); Medical Society of the County of Otsego, N. Y. (Cooperstown—annual); Ogdensburg Medical Association. *Wednesday, July 18th:* American Ophthalmological Society (Catskill, N. Y.).

Lectures and Addresses.

A CLINICAL LECTURE IN GYNÆCOLOGY.

DELIVERED AT THE NEW YORK POLYCLINIC.

By JAMES B. HUNTER, M.D.,

PROFESSOR OF GYNÆCOLOGY.

Fibroid Tumor of the Uterus; Prolapsus.—Anteflexion of the Uterus.—Subacute Endometritis.—Laceration of the Cervix Uteri with Retroversion.—Carcinoma of the Cervix Uteri.—Laceration of the Cervix Uteri.—Anteflexion accompanied by Sterility.—Abscess of the Vulvo-vaginal Gland.—Laceration of the Cervix Uteri.—Long, Conical Cervix; Sterility.

CASE I. FIBROID TUMOR OF THE UTERUS; PROLAPSUS.—

GENTLEMEN: This woman, who has passed the menopause a few years, presents a prolapsus of the uterus almost in the third degree; the organ lies almost completely outside the vulva. It was replaced last week, and a cup pessary was introduced, but, as some distress followed, the patient removed the pessary herself. You will observe, however, that no erosion has followed its use, and doubtless when a larger one is applied it will support the organ perfectly without causing discomfort. But why should the prolapsus in the case of this patient, whose perinæum has not been extensively lacerated, and whose uterus is only of moderate size, exist in so severe a degree? You will remember that last week we spoke of certain other conditions complicating these cases, and tending to aggravate the degree of prolapsus, among which was fibroid tumor of the uterus. The gentleman who inserted the pessary last week failed to detect such a tumor, one of considerable size, which exists in the present case. The patient's health, however, being in other respects in a very fair condition, doubtless we shall be able to introduce a pessary that will support the organ, and give her material relief so long as she continues to wear it, without causing much discomfort. This hope is further sustained by the fact that the patient has passed the menopause, and the tumor from henceforward will decrease rather than increase in size. Such being the case, it answers the question which one of you asks, Should the tumor not be removed by an operation? This is altogether unjustifiable, for the prolapsus, of which the tumor is one of the causes, can be corrected by a pessary, and within a few years the tumor itself will doubtless have contracted very greatly, and may finally disappear almost completely. Being subperitoneal, as I believe it to be, it could probably be removed with comparative safety by laparotomy, but the operation is not necessary. The tumor no doubt has been growing for many years, and only within a short time of the menopause reached considerable dimensions, so as to aid materially in aggravating the prolapsus of the uterus, which probably first started in a laceration of the cervix and of the perinæum.

In answer to your inquiry, May it not be of a malignant form? I would say that the growth has too regular and smooth an outline for a malignant growth, the latter usually

presenting distinctly irregular and even jagged outlines, easily recognizable and very suggestive of its character to the experienced surgeon. Moreover, the patient's general condition is comparatively good, and not in the least indicative of a constitutional affection.

[It may here be remarked that the examination and the application of the treatment of each one of the patients were by the members of the class, under the immediate direction of the speaker.—REPORTER.]

CASE II. ANTEFLEXION OF THE UTERUS.—This is a patient, an unmarried woman, suffering from extreme anteflexion of the uterus, who presented herself at the clinic a week ago, at which time we passed sounds for the purpose of dilating the uterine canal and straightening the organ, beginning with a small instrument and gradually increasing the size. As her home was somewhat distant, we could not carry the dilatation on a single occasion to the extent that we might have done had she been in a hospital. A slight amount of pain was caused at the time of the introduction of the instruments, which, however, soon passed away, and left no evil result. We find to-day, however, that recontraction has taken place, and we are unable to go farther with the dilatation than on the former occasion on account of the degree of tenderness that she complains of. This patient's case belongs to that rare class of anteflexion of the uterus unaccompanied by dysmenorrhœa. The pain which usually accompanies the condition just before the monthly period is due to the accumulation of the menstrual fluid in the uterine canal because of its inability to escape through the bent and constricted internal and, possibly, external os. Where the patient escapes such pain it is probably to be accounted for, in some instances, by the fact that when the fluid begins to accumulate it so far raises the uterus and straightens its canal that it escapes before accumulating in large quantity. I once treated a patient in whom the anteflexion was so extreme that the uterus presented the form of a fish-hook; yet the patient did not suffer from dysmenorrhœa. These cases are always troublesome to treat, and complete cure can never be promised. They are usually congenital, as is doubtless true in the present case. The treatment consists in dilatation of the cervical canal with graded dilators, at the same time tending more or less to straighten the uterus, and in retaining the organ in its improved position by means of a pessary.

CASE III. SUBACUTE ENDOMETRITIS.—The next patient is thirty-two years of age, and was here last week, when we recognized profuse leucorrhœa, due to subacute endometritis. The patient was very sensitive to the passage of the sound. No other abnormal condition whatever could be discovered. Churchill's tincture of iodine was applied to the uterine canal by means of an applicator wrapped with cotton, of which, I may here remark, you should ever have a number on your table, ready for use, for they cost but little, and one alone may not answer your purpose. It is true, as you suggest, that sometimes it is with difficulty that the iodine, the carbolic solution, the nitrate of silver, or other application which you may desire to use, is applied

throughout the entire uterine canal; that it is more or less neutralized in certain cases by the secretions within the cervix before it reaches the fundus; but this may be more or less effectually guarded against by carefully wiping the canal dry with cotton before the solution is introduced. The uterine sound is not usually of much assistance in making the applications. An instrument has lately been invented by means of which, on turning a screw, the solution contained within a syringe may be projected upon the cotton applicator after it has been introduced through the cervical canal up to the fundus of the uterus. You will observe that the patient makes no resistance to the passage of the instrument until the internal os is reached, when she flinches, showing considerable sensitiveness at that point, which is not infrequently the case in endometritis, and which is an indication that great care should be taken in the management of the case. The application should not be made oftener than twice a week, and, if the patient afterward complain of considerable pain, she should be allowed a longer interval for rest. Having made the application, a wad of cotton with a string attached is introduced and rests against the cervix, and may be removed with perfect ease by the patient. The application should not be made two or three days before nor directly after a menstrual period.

CASE IV. LACERATION OF THE CERVIX UTERI WITH RETROVERSION.—This patient was here at a previous clinic, at which time we discovered a severe laceration of the cervix uteri, with a strong degree of retroversion of the organ; the retroversion, indeed, almost assumes the form of a retroflexion. The patient complained of great tenderness on pressure against Douglas's cul-de-sac, so much so that it was considered unwise to attempt to restore the uterus to its normal position, which it would require a little violence to accomplish. We therefore simply made an application of the tincture of iodine to the raw surface of the cervix, and gave the patient general directions with regard to her health, and as to washing out the vagina. The uterus can not be replaced immediately, which would require considerable violence, but it must be done gradually, and the treatment, before it can be said to be successful, will have proved somewhat tedious. There are some small cysts which have sprung up within the cervix that will require to be removed with the scissors in order to effect their permanent cure; it can not be done with any application, although, where an operation would not be allowed, material relief might be obtained by such means.

CASE V. CARCINOMA OF THE CERVIX UTERI.—In examining this patient, please to introduce your finger into the vagina with great care, as the diagnosis is at present very easily made, and careless manipulation might cause hæmorrhage and give the patient unnecessary pain. This woman presented herself at the clinic about a month ago, when we found laceration of the cervix, and a peculiar hard feeling—a feeling as of a whipcord around the wounded portion, which was very suggestive to the experienced gynecologist. The diagnosis was made of epithelioma of the cervix, and, although in the minds of some there may have been a doubt regarding the case, we felt so positive in our diagnosis that amputation of the cervix was advised, but at

that time there was no vacant room in the hospital, and the operation had to be postponed. You see the appearance which the disease has taken on since that time. It has rapidly advanced, the cervical tissues have begun to break down, and the odor is very disagreeable, peculiar to malignant disease. As in many cases, the disease here has developed at the seat of laceration. The statement has been made by some, and denied by others, that frequent pregnancies favor the development of cancer of the uterus. This case might be considered as corroborative of that statement: the patient has had nineteen pregnancies. The only treatment which could be adopted, besides palliative measures, is amputation of the diseased tissue, and it is questionable whether the disease has not advanced too far to justify such operative interference.

CASE VI. LACERATION OF THE CERVIX UTERI.—This patient I show you to-day in order that you may see the result of the operation performed recently for laceration of the cervix uteri. You will remember that the uterus was retroverted, and that the cervix presented the usual appearance present in such cases, and the patient was suffering from the usual train of symptoms. The cervix now, you will observe, presents almost a perfectly normal appearance, and the uterus has resumed its normal position and remains there. The patient is making use of injections of hot water daily, and doubtless still greater improvement in her symptoms will be manifest within a few days. In answer to your question, I would state that, aside from certain exceptional cases, it is unnecessary to have a patient coming to your office every day; twice or three times a week is often enough for almost every case where the patient's condition admits of her visiting you at your office; to have a patient come every day of the week, as is required by at least one physician of this city, an irregular, is simply the trick of an impostor. The uterine canal here, as shown by the sound, is not a perfectly typical one, but pursues a somewhat irregular course, as not infrequently happens, and yet it can not be said to be abnormal.

CASE VII. ANTEFLEXION ACCOMPANIED BY STERILITY.—This patient is twenty years of age; has been married two years; has never been pregnant, although she says she desires to bear children. She suffers from dysmenorrhœa, and pain is particularly severe two days before the flow. Upon examination, we find marked anteflexion, although not in so extreme a degree as in the case before presented, and we shall hope therefore that this patient may receive some benefit from treatment; that she may be so far benefited as to be able to bear children, although it is never well in these cases to promise the patient a positive cure. She has not menstruated for six weeks, and it is not safe, therefore, to pass a sound, notwithstanding the probabilities are altogether against the existence of the pregnant state. Should the method before mentioned prove ineffectual in straightening the uterus, resort might be had to the operation for straightening the canal by cutting a piece out from the external and the internal os, correcting to some extent the acute flexion of the canal which exists near the internal os at present, and thus admitting of a freer exit of the menstrual fluid.

CASE VIII. ABSCESS OF THE VULVO-VAGINAL GLAND.—

This woman was present at a former clinic, suffering from symptoms due to retroversion of the uterus. We replaced the organ and inserted a pessary, and she returns to-day saying that the instrument gives her some discomfort. It is not unlikely that it is a little too large, although any instrument would be apt to cause her a slight amount of discomfort in the condition that she is in. We will remove the pessary, insert a cotton plug into the posterior cul-de-sac, and direct her to return again, when she will probably be able to wear a pessary with ease.

You will observe that in the left labium there is a swelling which probably has gone on to the formation of an abscess, but she is not prepared to have it opened to-day. It is due, doubtless, to occlusion of one of the vulvo-vaginal glands, and in its present condition can be treated alone by an operation.

CASE IX. LACERATION OF THE CERVIX UTERI.—Our time is limited, gentlemen, but in the few moments to spare I will show you two patients, and make but few remarks upon the condition present. You can not see too many patients, nor pass the speculum and the sound too often, for with experience comes ease in gynecological practice. The first patient was here on a former occasion, suffering from a slight laceration of the cervix, with erosions and a constant leucorrhœal discharge. Under treatment she is feeling much better. The tincture of iodine will again be applied, and I would remark that the ordinary tincture would have no effect in such a case as this; it is entirely too weak. You should use Churchill's. Carbolic acid may be used in some cases, more especially where it is desired to make the application to the fundus.

CASE X. LONG, CONICAL CERVIX; STERILITY.—The other patient is one who is sterile, and in whom we find retroversion of the uterus and a long, conical cervix. Sterility is a condition which often accompanies the long, conical cervix, but it is doubtful whether it is due thereto; whether it is not due to some other factor present in such cases. At any rate, amputation of the cervix, formerly practiced more than at present, does not cure the sterility.

A CLINICAL LECTURE ON EXOPHTHALMIC GOÏTRE

(*giving the further progress of the case described in a former lecture**).

DELIVERED AT THE HOSPITAL OF THE UNIVERSITY OF
PENNSYLVANIA,

By WILLIAM PEPPER, M. D., LL. D.,

PROVOST AND PROFESSOR OF CLINICAL MEDICINE.

GENTLEMEN: It is with great regret that I have to tell you that the patient whom you saw a few weeks ago, suffering with a marked degree of exophthalmic goitre, gradually sank despite all that we could do for him, and died on the 15th of this month (February). I have here the specimens removed at the autopsy, and, as I have not

yet examined them, I shall ask your attention to the report of the post-mortem examination.

You will remember that when he was admitted to the hospital he was suffering from an enormous goitre, with violent pulsation and rapid action of the heart (the pulse rate reaching 150 a minute under the least excitement), and there was a marked thrill on palpation. A more careful examination of the heart than had been made at the time he was before you revealed a systolic blowing murmur over the body of the organ. There was no albumin in the urine. The blood was not much altered in its corpuscular elements, but was reduced in its total bulk—that is to say, the quantity of the blood was greatly lessened, but the quality was not much impaired. There had been a great loss of flesh. Three months before admission he had weighed one hundred and seventy-five pounds, on admission his weight was one hundred and thirty-eight pounds, and on February 1st it was one hundred and ten pounds. The disease from which he was suffering had apparently been brought on by over-work, great exposure, and the impairment of nutrition resulting from chronic diarrhœa. This diarrhœa continued in an obstinate form after his admission, and was doubtless one cause of the rapid loss of flesh. Although the crasis of the blood, as determined by counting the corpuscles, did not appear to be much impaired, yet, after he had been in the house for some time, he began to suffer from epistaxis, not severe, but frequently recurring. The diarrhœa, as I have said, proved exceedingly difficult to check. Remedies controlled it for a few days, and then it would return again. The same was true of changes in the diet.

A note made on February 8th says: "The liver is enlarged; the gall-bladder is distended; the edge of the liver is thickened and rounded; the tongue is dry and glazed; the pulse is growing more rapid (152 in the recumbent position); the murmurs are becoming more intense, and the dullness over the heart is increasing." There were also observed some signs of engorgement of the lungs and of pleurisy over the base of the left lung; severe attacks of diarrhœa came on every few days; the matters discharged are described as looking like green grass chewed up and spit out. About the 1st of this month a fullness and hardness appeared in the right iliac fossa. An examination of the blood, made by Dr. W. E. Hughes at this time, showed evidences of deterioration. In a cubic millimetre there were but 3,000,000 red blood globules, while the number of the white globules had increased until there was one white to every fifteen red corpuscles. The pulmonary symptoms gradually became more marked, the diarrhœa continued, the pulse became very rapid, and he began to have evening fever. The eyelids no longer covered the eyeballs, but when he was asleep there was a portion, at least one fourth of an inch in width, exposed. As a result of this, there was some conjunctival inflammation. Typhoid symptoms supervened; the teeth were covered with sordes; the tongue was coated with a thick brown fur; the heart beat so violently that it moved the entire body; the fullness in the right iliac fossa remained the same, and the cardiac dullness slightly increased. No albumin appeared in

* See vol. xxvii, p. 141.

the urine. Thus the case ran on to a fatal termination, apparently from failure of the heart. The rapidity of the heart's action toward death became phenomenal. As counted over the heart, it was 220, 218, and 195 a minute, while the pulse, as nearly as it could be counted, was 140, 160, and 180 a minute, showing that, although the pulse was extremely rapid, it did not keep pace with the excessive frequency of the cardiac action.

The way in which exophthalmic goitre proves fatal is usually by a continued deterioration of the blood, which becomes more and more watery, leading to hæmorrhages and dropsy; by greater and greater impairment of the digestive apparatus; and by increasing prostration of the nervous system; the violent heart action continuing, but its force growing weaker and the organ evidently becoming dilated, flabby, and less and less able to maintain the circulation.

I shall now read the report of Dr. Hughes of the conditions found after death.

POST-MORTEM MADE SHORTLY AFTER DEATH.—Body much emaciated and generally pale, but upper part of chest, neck, and face somewhat congested. Eyelids covered the eyes. Skin slightly excoriated over the back.

Head.—Scalp congested. A large quantity of dark blood exuded on section. The periosteum stripped from the skull with remarkable ease. There were numerous points in the bone from which dark blood flowed. The bones were normal and of the proper thickness. Dura mater adhered tightly to the skull, but was not thickened. The sinuses, veins, and arteries were filled with dark fluid blood. More than a pint in all escaped. No serum in the arachnoid sac. Brain apparently normal, with the exception of perhaps a little congestion. Brain weighed 1,360 grammes. Veins and sinuses of the spinal cord filled with dark fluid blood. The cord and membranes normal.

Lungs.—Six ounces of fluid serum were found in the pleural cavity. On the left side numerous firm white bands of adhesions passed between the lung and the lower part of the chest wall and the diaphragm. There were also adhesions between the lobes. On the right side there were only a few adhesions between the lobes and none to the chest wall. In the visceral pleura on the right side there were numerous small bodies resembling tubercles. These have not yet been examined microscopically. They were most marked between the lobes. There were none in the left pleura. The lungs were slightly congested hypostatically. Their structure was normal, with the exception of a small fibrous nodule at the left apex. The bronchial glands were dark and somewhat enlarged.

Heart.—The right side of the heart was dilated and filled with dark fluid blood. A slender chicken-fat clot extended into the pulmonary artery. The left side was firm and contracted, and the walls were thickened. The valves of the right side were competent; those of the left side were incompetent, the leaflets being slightly thickened but not rigid. The left auricular appendage was rather larger than normal, touching the chest wall. The heart weighed 420 grammes. Both the pulmonary artery and the aorta were dilated, but the lining membrane was normal.

The *thymus gland* was larger than normal, and hard.

Thyroid gland.—This body was of a pinkish-purple color. It was enlarged, the hypertrophy being most marked in the left lobe. On section, it was firm, and evidently contained an overgrowth of fibrous tissue, and numerous small cysts were scattered throughout its substance. The arteries were apparently not enlarged. The gland weighed 235 grammes.

Liver.—Weight, 1,540 grammes. It was thick and firm. Externally, it was of a mottled red and gray color. On section, there were found in the right lobe, especially toward its convexity, irregular masses of a purplish brown color, with white spots and streaks scattered through them. No appearance of acini. Deeper, there was very little of this purplish tissue, but the liver was almost uniformly of a bright yellow, with dark clots of liver tissue in the center of the acini. In the left lobe there was less of this new purplish tissue, and more white, which was scattered through the whole of the lobe, apparently developed around the venules and surrounded by bright liver tissue. The veins were dilated. There were numerous adhesions between neighboring parts and the gall-bladder, which was filled with bile. Some bile also exuded from the section of the liver.

Pancreas.—This was of normal size, but very hard, apparently from a development of fibrous tissue. It was more tightly adherent to the surrounding structures than normal. The arteries stood out prominently, and their walls were thickened.

Spleen.—The spleen was tightly adherent to the adjacent structures. There was a depression on its convex surface, which appeared to be the result of inflammation. The Malpighian bodies were increased in size. Otherwise the appearance was normal. The spleen weighed 320 grammes.

Kidneys.—These weighed, respectively, 210 and 220 grammes. They were congested. The cortical substance was increased and slightly granular. The arteries stood out prominently. The stellate veins on the surface were injected. The capsule was too adherent. On the surface were scattered numerous small cysts. The lower extremity of the right kidney was tilted forward until it was on a level with the anterior surface of the spinal column.

The *abdominal lymphatic glands* were enlarged and purplish.

The *stomach* and *intestines* were dark, but otherwise normal.

The *cervical sympathetic* was enlarged, the superior ganglia were markedly so, but normal in color and consistence. The semilunar ganglion was somewhat enlarged.

The *supra-renal capsules* were small, but otherwise normal.

There was a marked increase of adipose tissue behind the eyeballs, but no discernible dilatation of the arteries.

The report of the *microscopical examination*, made by Dr. Henry F. Formad, reads as follows:

Thyroid gland.—Sections taken from both lobes and from the interior as well as from the periphery showed that the enlargement was due to a uniform glandular hypertrophy. There was nothing abnormal histologically. The acini were not larger and showed no more cystic change than is observed normally. Colloid material, which was also found normally, was proportionally not in excess. The connective tissue was, however, somewhat increased in some places, and slight extravasations of blood from the capillaries were noted. The condition of the gland can be described as one of numerical hypertrophy.

Heart.—Cardiac muscle, taken from both the right and the left side of the organ, showed some fatty change, the fibers showing striation very indistinctly, and being infested by fat granules. The connective tissue was decidedly in excess.

Liver.—This organ showed in many places distinct evidences of red atrophy in a slight degree, the changes being expressed by fatty degeneration of the liver cells in the center of some of the lobules and around the smaller branches of the hepatic veins. At the periphery of the individual acini, a few fatty-infiltrated liver cells were seen in the portal zone. The hepatic veins were strongly congested; the portal vessels were empty but normal. In a few places a catarrhal condition of the gall-ducts was ob-

served, together with some bile infarctions. The condition of the liver expressed an early stage of red atrophy, although it may be said that the usual blood pigment around the hepatic veins was absent.

Kidneys.—These showed evidences of subacute catarrhal nephritis. The renal disease, although well expressed, was of recent origin, as the interstitial changes were only moderately marked, and the epithelium, which was swollen and large and degenerating, showed very little fatty change. There was in several places slight cystic change in the cortical substance. The blood-vessels, particularly the veins, were congested, and the Malpighian bodies were gorged with blood and prominent.

Spleen.—This organ showed the evidences of leucæmia. The Malpighian bodies were enormously enlarged, and the cells of the pulp also showed active proliferation.

How unsatisfactory is this examination in many respects! We find very extensive lesions, but some of them are evidently of recent origin, as, for instance, the engorgement of the lungs, the pleural adhesions, and the changes in the kidney. These must, therefore, be regarded as intercurrent affections. The changes in the spleen are more serious. We should have expected to find it greatly enlarged where there was as marked cardiac failure as was here present; but there are also leucæmic changes in the Malpighian corpuscles, and we note that toward the close of life evidences of leucæmia were found in the blood. Changes were found in the heart: The mitral valve was incompetent, and there was some fatty degeneration with dilatation, but not sufficient in degree to cause the troublesome symptoms from which this man suffered. It is clear, therefore, that, as usual, we are to find the essence of this disease in a morbid condition of the vaso-motor ganglia.

A point to which I wish particularly to draw your attention is the long-continued diarrhœa, which could not be arrested by diet, strict rest in bed, or any medication we could employ, either by the mouth or by the rectum. As you have heard from the report of the autopsy, no lesion was found in the stomach or intestines. There appears to have been nothing wrong with the mucous lining of the bowel, which was examined throughout its entire extent. It is not improbable, in view of the apparently normal condition of the mucous membrane, that the excessive secretion from the intestinal walls was dependent upon partial paralysis of the nervous filaments going from the solar plexus to the vessels of the intestine. The control which the sympathetic ganglia exercise over intestinal secretion is very positive. Section of the nerve filaments passing from the solar plexus to the intestine will be followed by choleraic discharges. It is certain that in cholera infantum and in Asiatic cholera a morbid condition of the abdominal sympathetic has a great deal to do with the intestinal discharges and with the symptoms of profound nervous prostration which attend these diseases. In the present case, the persistent diarrhœa, without ulceration, appears to me to indicate that there must have been a great change in the action of these ganglia. I connect it with the marked disturbance of the vessels controlled by the upper ganglia of the sympathetic, which gave rise to the symptoms of Graves's disease.

It is many years since I have seen the post-mortem results in a case of exophthalmic goitre before. By far the

larger proportion of patients can be greatly benefited and even cured by treatment. It is only when the disease of the heart, or of the kidneys, or of the vaso-motor nerves, is organic and deeply seated, or when the secondary changes in the liver, spleen, and kidneys develop to a marked extent, that an unfavorable termination may be expected.

March 3d.—Gentlemen, I have to-day the report of Dr. William E. Hughes, who made the microscopical examination of the sympathetic ganglia in the case of exophthalmic goitre to which I have called your attention on several occasions. It reads as follows:

The cervical ganglia were to the naked eye enlarged and grayish, but not hard. On microscopical examination, they were found densely infiltrated with small-round cells, which pushed the nervous elements apart and pressed upon them. The tubules were compressed, distorted, and in some places destroyed. In some places they were infested with a pseudo-membrane of small-round cells, looking as though there might have been a slight inflammation of the tubules. The cells were in places indistinct, shriveled, and compressed, their nuclei not discernible; in other places they were granular, with indistinct nuclei; in other places they were crowded with brown pigment cells and granules; and, finally, some of them had entirely disappeared. The walls of the arterioles were thickened. The lymph spaces were dilated.

In the semilunar ganglia the cells were indistinct, taking staining very poorly, and some of them seemed to have undergone a slight amount of peculiar hyaline change. The nuclei and nucleoli took staining well, and were perfectly distinct. The structure was otherwise normal. There was no infiltration of cells, nor any enlargement of the vessels.

The supra-renal capsules were normal.

These changes are far more marked than have hitherto been noted in exophthalmic goitre. It certainly appears probable that they were not merely due to an atrophy of the ganglionic cells, dependent on parenchymatous inflammation of the ganglia. In addition to serious lesions of the ganglionic cells, there were extensive interstitial changes. It is clear that this was one of those cases of exophthalmic goitre where, the lesions of the ganglia being organic, the symptoms were necessarily intractable. The lesions in the semilunar ganglia are not so advanced as those in the cervical sympathetic. At the same time these lesions connect themselves very definitely with the excessive and intractable secretion from the intestinal mucous membrane, and, I have no doubt, constituted, in large part, the essential cause of the diarrhœa which was so prominent a symptom. The changes in the cervical sympathetic ganglia are wholly adequate to explain the marked symptoms connected with the circulation, the thyroid gland, and the eyeballs, and also the failure of all treatment to control those symptoms.

GUÉNEAU DE MUSSY'S HÆMOSTATIC PILLS.—The "Union médicale" gives the following formula:

Extract of rhatany,	4·00 [1 drachm];
powdered ergot,	3·00 [15 grains];
powdered digitalis,	0·50 [8 grains];
extract of hyoseyamus,	0·25 [4 grains].

Divide into twenty pills. From four to six to be given in the course of twenty-four hours.

Original Communications.

DISLOCATION OF THE STERNAL END OF THE CLAVICLE

WITH DISLOCATION OF THE FIRST AND SECOND COSTAL
CARTILAGES.

ALSO A CASE OF

DISLOCATION OF THE CARTILAGES OF THE FOURTH, FIFTH, AND SIXTH RIBS.

By ALBERT N. BLODGETT, M.D.,

BOSTON.

(Concluded from page 36.)

The dislocation of either extremity of the clavicle, although not so excessively rare as that of the cartilages of the ribs, is, nevertheless, to be reckoned among the more infrequent injuries. In the Middlesex Hospital during sixteen years, ending June 30, 1867, dislocation of the clavicle occurred sixteen times among 521 dislocations of the upper extremity, or 3.07 per cent. of all such dislocations. During the same time, 2,705 cases of fracture of the upper extremity were treated at the same institution, or, in all, 3,226 traumatic lesions affecting the bones of the upper extremity presented themselves for treatment at this hospital in which the dislocation of one or the other articulating surface of the clavicle occurred sixteen times, or .49 per cent. of all these injuries. Of these sixteen cases, thirteen were males and three were females. The time of life in which this accident most frequently occurs is between the years of fifteen and thirty, one fourth of the whole number of cases occurring within this period.

From the fact that the only articulation of the upper extremity to the remainder of the skeleton is by means of the claviculo-sternal joint, this is properly regarded as the first point at which a luxation of any of the bones of the upper limb can take place. The extreme rarity of dislocation of the clavicle in comparison with the fracture of this bone has occasioned much surprise. The radius is the only bone in the upper extremity which is more frequently the seat of fracture than the clavicle, while the acromion is the only known dislocation of this limb which is less frequent than that of the clavicle.

The dislocations of the sternal end of the clavicle have been described as forward, backward, and upward. The dislocation forward is generally produced by some violence which pushes the outer end of the clavicle forcibly backward, such as a blow or fall on the front of the shoulder, or in children by pulling the arm. The head of the bone is easily felt beneath the skin, leaving no doubt as to the nature of the injury. According to Richet and Desprès, forward displacements of the internal extremity of the clavicle are very seldom observed, on account of the character of the articulation with the scapula, and the powerful muscular attachments which support the outer extremity of the bone. According to all those who have observed this accident, it has uniformly resulted from violence which had for its effect a powerful backward movement of the shoulder, thus producing rupture of the ligaments of the sterno-clavicular ar-

tication. Boyer saw one case in which the luxation was produced by a dancing-master who forcibly thrust the shoulders of a pupil backward in order to correct a faulty position. Desault observed a case in a porter who met with this accident while carrying a heavy basket by means of a strap over the shoulder. The weight of the basket pulled the shoulder backward with sufficient force to cause a dislocation of the sternal end of the clavicle. Méliet reported a case in which a dislocation of the sternal extremity of the clavicle was produced in a child who was caught by one arm while falling from a coach. Professor F. H. Hamilton has recorded the case of a man, aged forty-five years, who was thrown from a horse and suffered a fracture of one leg, and a forward dislocation of the left clavicle at the sternal end. The case occurred in the practice of Professor White, of Buffalo. No mechanical treatment was of any benefit, and at the end of two years the position of the head of the bone was unchanged. Movement of the shoulder forward or backward was accompanied by a corresponding movement of the sternal end of the clavicle. The injured arm was not quite so strong as the other, and its freedom of motion was somewhat impaired.

Professor Hamilton* also mentions the case of a lad, twelve years old, who fell into a cellar, August 20, 1856, and adds: "On the fifth day I found the bone displaced." The result is not mentioned, and there is no further description to identify the case or locate the injury. Another case mentioned by the same author occurred in a boy who was treated at the Buffalo Hospital, and was seen by Professor Hamilton, who said: "Five days after, I found the bone out and quite movable." Treatment did not reduce the deformity, though function of the limb is said to have been restored. In all the other known cases of this dislocation, the accident has been caused by falling upon the shoulder, and in all cases the injury has resulted from an exaggeration of a physiological movement. It is certainly surprising that a gentleman like Professor Hamilton should have neglected to make a careful statement of cases of this rare injury which have come under his personal observation. In two of the cases which he reports in his work as having himself seen, he does not state the location of the head of the bone, nor even the side of the body upon which the injury was sustained. The omission of such essential particulars has caused the greatest confusion in the collection of similar cases, and materially lessens or quite destroys their value for statistical reference.

Concerning the backward dislocation of the clavicle, Richet and Desprès speak thus: "The backward dislocation has been observed a certain number of times, and is the least rare of the dislocations of the clavicle except that beneath the acromion. It is most frequently produced by some force which has the effect of carrying the shoulder forcibly forward (Sir Astley Cooper). It has been known to occur from a fall, driving the clavicle toward the middle line of the body by pressure upon the shoulder, or by exercising direct backward pressure upon the internal end of the clavicle (Spanda, Pellioux). A case is reported in which the sternal end of the clavicle was dislocated

* "Fractures and Dislocations," 1871, p. 562.

backward by the kick of a horse, the blow being received upon the front of the chest in the clavicular region. Richet and Desprès state that "in this lesion the ligaments of articulation and the tendon of the sterno-cleido-mastoid are torn from their attachments to the sternum, and the internal end of the clavicle is found behind the supra-sternal notch, and usually more or less above or below; but it is only very rarely that the end of the bone disappears behind the body of the sternum." One case is reported by Sir Astley Cooper of gradual displacement of the clavicle backward in a patient with rachitis, in which pressure upon the œsophagus ensued requiring resection of the end of the bone, which was performed by Mr. Davie. A case is reported by Mr. Holmes, from the practice of Mr. De Morgan in 1852, in which a girl ten years old was knocked down by a carriage and was thought to have been trodden upon by one of the horses. There was dyspnœa, and where the head of the right clavicle should be was a depression into which the finger might be thrust, and the articular surface of the sternum could be plainly felt, while the head of the clavicle was evidently behind it. The treatment was by a splint behind the shoulders, with a pad between it and the spine, by which the shoulders were drawn backward. The dislocation was immediately reduced, the treatment was continued for four weeks, when the articulation was quite firm and the arm could be moved without causing pain.

The dislocation upward appears to be the least frequent of all, and has only recently been recognized as a distinct surgical lesion. Five cases of this injury are recorded in Europe, and Professor Hamilton has added one in America. The recorded causation is interesting, and corresponds almost exactly with that in our patient. Mr. Flower says: "They seem all to have been occasioned by a violent force which carried the shoulder downward and inward." The head of the bone is felt above the upper border of the sternum, in one recorded case lying between the sterno-mastoid and sterno-hyoid muscles. Reduction is easily effected, but it is well-nigh impossible to retain the head of the bone in position, and I am not able to find the record of a case in which this was accomplished. There is generally considerable permanent displacement of the end of the bone, and always more or less impairment of certain functions of the corresponding arm. In one recorded case the patient was unable to lift weights above the head with the arm of the injured side, and our patient is prevented from executing some of the common movements of the arm on that side.

Dr. Hamilton states that "this injury seems to have been produced in all cases, so far as can be ascertained, by a force operating upon the end and top of the shoulder, in consequence of which the head of the clavicle is pushed and at the same time lifted, as it were, from its socket, tearing not only its capsule, with the ligaments which immediately invest the capsule, but also, in some instances, the costo-clavicular ligament, with some fibers of the sub-clavian muscle. The sternal end of the clavicle is found riding on the top of the sternum, its head being placed between the sternal fasciculus of the sterno-cleido-mastoid muscle on the one hand and the sterno-hyoid on the other."

To quote again from Richet and Desprès: "The dislocation upward is very rare. Thus far but two cases are known. The dislocation is produced, so far as known, only by violence acting forcibly downward upon the extremity of the shoulder. The only two reported cases were observed by Sédillot and Baraduc, in one of which the end of the clavicle was easily felt above the supra-sternal notch, and a triangular depression existed beneath it at the seat of the sterno-clavicular articulation, while in Baraduc's case the extremity of the bone seemed to be situated between the bodies of the sterno-mastoid and the sterno-hyoid muscles. In certainly one of these cases there was permanent displacement of the internal end of the clavicle, and the patient never fully recovered the motions of the injured arm." Dr. Carl Emmert, in his great work, "*Lehrbuch der Chirurgie*," agrees entirely with what has already been presented from other authors concerning dislocations of the sternal end of the clavicle, and adds the notes of an American case which I have not found elsewhere mentioned in continental literature, but which is probably that reported by Professor Hamilton,* as follows: "J. M., aged forty-four, August 28, 1858, while seated upon a load of wood, was caught under the bar of a gateway and violently crushed, the right shoulder being forced downward and a little backward. . . . The sternal extremity of the right clavicle was thrown upward so far as to rest upon the front of the thyroid cartilage, occasioning considerable pain, difficulty of respiration, and loss of speech." Permanent deformity, consisting of an upward projection of the head of the clavicle to the extent of half an inch, and an inward displacement of the head of the bone toward the median line, together with protrusion forward, remained. There was inability in the arm when executing movements above the head.†

Professor Hamilton also mentions another case of this accident in a woman of fifty, whom he saw nine weeks after a fall, but he has given no description of the injury, not even designating the side of the body upon which the

* *Op. cit.*, p. 528.

† Since finishing this paper, the notes of the following additional case have kindly been placed at my service by Dr. Marcy, the attending surgeon:

Boston, May 18, 1883.

DEAR DR. BLODGETT:

In March, 1872, I saw, soon after the accident, Mrs. Charles Wood, then living on Lincoln Street, Cambridgeport, who had fallen down a flight of stairs and struck the left shoulder against the wall. The chief injury was the dislocation of the sternal end of the clavicle inward and upward. It seemed almost entirely free from its attachment to the sternum. The sterno-cleido mastoid, in certain movements of the head, lifted the clavicle, and, of course, such movements were attended with pain. The attempt was made to keep the shoulder *up*, *out*, and *back*, which movement readily reduced the dislocation, but the result was not satisfactory. When last seen, quite a period after the injury—months—the sternal end remained about half an inch nearer the median line than its fellow, and higher by about the thickness of the bone. The mobility of the arm was very nearly perfect, and not seriously impaired in its usefulness, although the end of the sternum moved quite a little with certain movements of the shoulder. I should have reported the case, but came in just as you completed your paper, and thought it, therefore, wise to remain silent.

Very truly,

H. O. MARCY.

dislocation existed, so that this case is not available for statistical purposes.

Bryant, in his work on surgery, mentions the case of a woman, aged twenty, whom he saw two years after the injury, in which both clavicles had been dislocated, and were found resting upon the top of the sternum. They could be easily returned to their proper position, but, on removing the pressure, the displacement immediately recurred. He also records a case of backward dislocation in a man aged fifty-two, who was injured by falling bricks. In neither of these cases is contained any accurate description of the injuries or the treatment, and they must be regarded with a certain amount of distrust, from the absence of most essential particulars. Mr. Hutchinson reports the case of a young man who was caught between a locomotive and a platform, and was "rolled round and round like a ninepin," by which a dislocation of both extremities of one clavicle was produced. There is no record of treatment or of the result, which would certainly have been possible with proper care on the part of the surgeon; and this important omission, especially when the extraordinary character of the injury is considered, throws grave doubts upon the authenticity of the case. Dr. Col, in the "*Gazette des hôpitaux*," reports the same injury in a girl aged seventeen, who was caught between the shaft of a wagon and a wall. The left clavicle was dislocated at both ends, the entire bone being displaced forward, and projecting at both ends. The treatment lasted two months, and resulted in a restoration of function, so that the girl resumed her former occupation.

Dr. J. F. South gives an account of a case of compound dislocation of the clavicle backward, which he says he saw in St. Thomas's Hospital in September, 1833. The patient was a man who had been buried by a slip of earth while excavating for a railway, and was injured by the sharp end of a pickaxe which had been driven into his chest. There was emphysema of the right side of the chest, and the right clavicle was separated from its sternal attachment and dislocated backward, so that it lay upon the right anterior aspect of the windpipe, and somewhat interfered with respiration and deglutition. The dislocation was reduced by drawing the shoulders backward and confining them in that position, the elbow being brought forward and fastened to the side. The wound was covered with sticking-plaster. The patient left his bed at the end of three weeks, and in six weeks was discharged. The sternal end of the clavicle was still a little backward, and more movable than natural.

An analysis of the reported cases of dislocation of the costal cartilages shows a lamentable want of care in the description of the injury, in some cases neither the age nor sex of the patient, nor location of the injury, being mentioned, and no indication being afforded by which the same case might be recognized if included in the tables of other observers. The same patients are to some extent quoted by different writers, the number of cases thus appearing larger than is actually the fact.

By comparing the descriptions of the cases enumerated in this paper, we must conclude that the five reported by Mr. Poland are also contained in the list of M. Chaussier,

who is much more explicit in the details of each case. Mr. Poland's first case, in which the injury was caused by dumb-bells, is evidently the same case which Chaussier reports as a dislocation of a cartilage in a young man produced by violently throwing the arm backward.

The second case, resulting from a drunken fall, is certainly the same individual whom M. Chaussier mentions as sustaining a dislocation of one of the cartilages while drunk. The third of Mr. Poland's cases, affecting a baker, may be either the third or fourth of M. Chaussier's list of dislocation of the ribs upon the cartilages, and, finally, the case which Mr. Poland describes as a dislocation of the fourth, fifth, and sixth ribs upon the cartilages is probably the same which M. Chaussier describes as a dislocation of most of the ribs upon the cartilages. The remaining undescribed case is also probably included in M. Chaussier's list. Mr. Poland's entire list of five cases, therefore, probably corresponds to identical cases reported by M. Chaussier. The case reported by Professor Gross is lacking in details, and the symptoms he enumerates are not those which we should expect from dislocation of the cartilages, but belong to fractures of osseous tissues. This interesting case, therefore, is not included in the analysis of cases, as will be evident from a glance at the following table presenting the cases collected by each of these distinguished writers.

MR. POLAND. Ribs and Cartilages.	CHAUSSIER.	
	Ribs.	Cartilages.
1 = dumb-bells—1" (cartilage).	1 = 8" right—7" left.	1 = 72 yrs., drunken fall
2 = drunken fall.	2 = most of ribs on cart.	2 = young man, by
3 = baker—4" left.	3 = 4" right.	throwing arm back
4 = 4" 5" and 6".	4 = 5" left.	ward.
5 =		

No. 1 = ... No. 2.

No. 2 = ... No. 1.

No. 3 = ... No. 3 (?).

No. 4 no history No. 2 (?).

No. 5 no history No. 4 (?).

To which are to be added 1 = Francis C., Boston.—1" and 2" cartilages right side.

2 = Fred C. G., St. John.—4", 5", 6" cartilages right side.

NOTE.—The latest important surgical work, the colossal "Hand-buch" of Eulenberg, which is at present in the press, contains the statement that the forward dislocation of the clavicle has been observed nineteen times, the backward dislocation sixteen times, and the upward dislocation nine times; and that simultaneous dislocation of both ends of the clavicle has been observed three times. No cases or data are given, and no classification of causation, or the sex of the individuals, is mentioned.

Malgaigne, in his work on dislocations, collected twenty cases of forward dislocation of the clavicle, of which fourteen were in men and six in women. The cases are not identified, nor the lesions described. He also presents eleven cases of backward dislocation of the clavicle, of whom ten were in men and one was in a woman.

He states that upward dislocation of the clavicle has occurred in five cases, of whom four were in men and one was in a woman.

For the reasons alluded to on a previous page, as well as the absence of accurate description and identification of individual cases, the foregoing statements of the number of observed instances of these rare injuries is thought to be liable to error, and these figures are not included in any of the results here presented. It is certainly not demanding too much if we require a description of such excessively rare and curious injuries as shall enable the reader to determine positively whether the same cases are included in the tables of different authorities. The absence of any means of knowing this in the statements contained in Eulenberg's work, and in that of Malgaigne, leads

to a feeling of doubt as to their absolute correctness. Should this paper have only the effect of leading observers to the exercise of a greater degree of care and precision in the description of important cases, I feel that a most valuable result will have been accomplished.

There exist, then, only four authenticated cases of dislocation of the ribs upon their cartilages, and but two of dislocation of the cartilages upon the sternum, previous to those reported in this paper.

To this latter and rarer variety these cases must evidently be added, and they, therefore, form the third and fourth known indisputable occurrences of this injury.

A similar review of the reported cases of upward dislocation of the clavicle shows that only those recorded by Richet and Desprès are thoroughly reliable, except the one recorded by Professor Hamilton. The case of Baradue is evidently included in Mr. Flowers's table, as the position of the head of the bone between the sterno-mastoid and sterno-hyoid sufficiently indicates the identity of the individual. The unfortunate lack of accurate observation, or, at least, of careful description of the cases reported, is much to be regretted, as it to some extent justifies a doubt as to the existence of this particularly rare lesion. It would certainly seem strange if any competent surgeon should fail to make a most particular and unmistakable account of a case of so great surgical interest, because the occurrence of any question as to the genuineness of a case tends strongly to exclude it.

The simultaneous occurrence of each of these exceedingly rare lesions in the same patient, without the serious injury of any other portion of the body, or pulmonary hernia, or hæmorrhage, and the recovery from the accident with almost complete restoration of function, lends an especial surgical importance to the case reported in this paper. The coincident upward dislocation of the clavicle and the dislocation of any of the costal cartilages is a most interesting occurrence, and is, I believe, without a parallel in the annals of surgery. No case of which I can find any record has presented more than one of these injuries, and this has too often been of doubtful authenticity.

CASES OF

SARCOMA OF THE UTERUS,

WITH REMARKS.

By H. C. COE, A. M., M. D.,

HOUSE SURGEON TO THE WOMAN'S HOSPITAL.

WHEN we remember that Dr. Emmet,* with his wide experience, claims to have met with only seven cases of sarcoma of the uterus, it will be readily understood why the writer feels some hesitation in stating that he has had the opportunity of studying *four* within the past six months. That the disease in question is not of common occurrence is maintained by all observers,† yet, with Dr. Thomas,‡ we

can not avoid the inference that it is less rare than is generally supposed. But, while it is doubtless true, as the latter writer suggests, that many sarcomatous growths are overlooked, being regarded as fibrous or cancerous in their nature, it is equally certain that the diagnosis of diffuse sarcoma of the uterine mucous membrane is often hastily made in cases of simple endometritis fungosa.* It is not the purpose of this article to generalize upon this form of malignant disease, which has been so thoroughly discussed by Gusserow† (to whose work the reader should refer for the literature of the subject), but to mention briefly the following cases, which seemed to be illustrative. The patients were all in the Woman's Hospital since the beginning of the present year, and remained under observation during periods varying from a fortnight to two months. The three who survived were all heard from a few days since, so that there is no doubt as to their present condition.

CASE I.—Mrs. B., a aged forty-one, married twenty-five years had had three children and three miscarriages. She was admitted to the hospital December 18, 1882, with a history of profuse menstruation since her last miscarriage, ten years previously. During the six months before entrance she had been able to walk with difficulty, owing to the presence of shooting pains in the back and groins. The pain in the back was sometimes unbearable and extended down both limbs. Menorrhagia excessive. There was no mention of an offensive discharge from the vagina during the inter-menstrual period. Patient's general condition poor. Examination showed that the uterus was enlarged and anteverted, with a depth of three and a half inches. The os was not dilated, so that it was necessary to employ laminaria tents before the dull-wire curette could be introduced. A quantity of soft, cauliflower-like material was scraped away, which was, unfortunately, not examined microscopically, the inference being that the case was one of ordinary fungosities.‡ Subsequent to the operation the vaginal discharge became so offensive that intrauterine injections were used. A month later the os remained patulous, the foul discharge persisted, and the pelvic pains were rather increased in severity. The curette, passed within the uterine cavity, encountered a soft, spongy mucous membrane. Small bits of tissue were detached from time to time and examined under the microscope, but with a negative result; the sections could not be distinguished from those which the writer had so often made in specimens of hyperplastic endometritis. But here was a case in which the clinical history came to the aid of the microscope. The patient's health rapidly depreciated, her bad symptoms continued, and the diagnosis of malignant disease was inevitable. She was discharged two months after entering the hospital, and is still declining steadily, without hope of recovery.

CASE II.—Mrs. J., aged fifty, entered the hospital September 15, 1882, for the removal of a large ovarian cyst. The case was reported at length in a former number of this journal,‡ and will not be repeated here. Suffice it to say that, after several accidents, she recovered from ovariectomy, to have a uterine polypus removed two months later. The tumor was easily detached, as the pedicle had already begun to slough; but this simple operation was followed by a profuse, watery, foul-smelling discharge, accompanied by darting pains in the groins and lower part of the abdomen. The woman's convalescence was retarded, and her health failed rapidly. A surprising

* "Principles and Practice of Gynecology," second edition, p. 509.

† Gusserow—"Neubildungen des Uterus," Art. "Sarcome"—has collected 63 cases.

‡ Art. on "Sarcoma Uteri," "Am. Jour. of Obstet.," vol. vii, 1874.

* Comp. Olshausen, "Ueber chronische hyperplasirende Endometritis," "Archiv für Gyn.," viii, p. 113.

† *Op. cit.* ‡ Olshausen, *op. cit.*, p. 133. * For March 24, 1883.

local change occurred, within a week after the removal of the innocent growth (an unmistakable *fibroid*), the posterior lip of the cervix had almost entirely disappeared by a necrotic process, which took its origin at the site of the former pedicle, the fornix vaginæ was firm and resisting to the touch, and the entire cervix was fixed—in short, there was every evidence of the invasion of malignant disease. The finger introduced within the patulous os impinged against a soft, fungoid mass, which was evidently breaking down.

As stated in the writer's previous report, the characteristic appearances of sarcoma were not noted in the sloughy masses scraped from the uterine cavity on several occasions, so that he expressed considerable doubt as to the correctness of the diagnosis of sarcoma.* The patient was discharged January 14th, and since then has been under constant observation. Her general health has improved since leaving the hospital, so that she has actually gained in weight; there has been no hæmorrhage or foul discharge; the pain is still present, though less severe. Locally, there has been but little change during the last four months. The uterus is still enlarged, and contains a mass of spongy material, the cervix is immovable, but there is no evidence of any extension of the disease; still, all doubt as to its character has been removed, because the writer has obtained bits of tissue with the curette which show on section typical small-round celled sarcoma. The operation of extirpation of the uterus has been advised, and seems to offer a fair prospect of success.

CASE III.—Miss S., aged thirty-eight, admitted March 3, 1883. Menstruation always irregular, with profuse flow. One year ago she began to have severe dragging pains in the pelvis, attended with frequent attacks of metrorrhagia, which had persisted up to the time of entrance. There was a constant watery discharge from the vagina of foul odor. She was much emaciated, with a well-marked cachexia.

Examination showed a uterus enlarged and tender on palpation. Through the gaping os a dull-wire curette was easily introduced and a large mass of soft brain-like material removed, the operation not being attended with either pain or hæmorrhage. A careful examination of the growth proved it to be sarcoma of the large-round-celled variety. The patient had an increase of pain after the curetting, and the discharge increased in amount and offensiveness, while her general condition became very bad. She improved under treatment so as to be discharged a month after entrance, somewhat better than when she came in. When seen a week ago, she was so much stronger that she had returned to her work.

CASE IV.—Mrs. S., aged forty, entered the hospital May 5, 1883. She had been married seventeen years, and had one child. Her menstrual history had been normal until six months previously, when she began to flow profusely at her periods, which recurred every two or three weeks. During the intervals there had been a constant sanguineous discharge, not especially offensive, and severe pains in the left groin and hypogastrium. When admitted she was blanched, very weak, and had no appetite. Required opiates to relieve pain, and was tamponed repeatedly because of recurring hæmorrhages. Vaginal examination disclosed a uterus enlarged to the size of the gravid organ between the third and fourth months, sensitive on pressure above the symphysis, with a widely dilated os, which was filled with a smooth, round tumor, apparently a fibroid. The cervix was incised bilaterally and the tumor removed piecemeal with the

spoon-saw, as it was too friable to come away *en masse*. The fragments (weighing nearly a pound) were of softer consistence than those of a fibrous growth, and the tumor was apparently without a capsule. Hardened sections presented all the appearances of spindle-celled sarcoma—a condition which had been suspected early in the operation. There was no hæmorrhage of any consequence. On the morning of the second day after operation the temperature rose to 105° F. (the rise not being preceded by a premonitory chill), while the pulse ranged from 140 to 150, the patient at the same time complaining of severe pain over the fundus uteri. As there was a foul-smelling discharge from the uterus, the cavity was syringed out with warm carbolyzed water at intervals of three hours, and this was continued during the next six days. Seventy-five grains of quinine and the continuous use of the abdominal ice-coil (which has replaced the cold douche as an antipyretic at the hospital) failed to control the temperature, which did not fall below 104° until the following night. In spite of every endeavor, the patient gradually sank as the symptoms of septic absorption became more marked, and succumbed on the eighth day succeeding the operation. Though an autopsy could not be obtained, there remained no doubt as to the character of the uterine tumor, and the ultimate cause of death.

It is not possible, from such a small number of cases, to make any general deductions which could be of value. The writer can only add that he has been able to verify the statements of Dr. Thomas in his clear and concise paper before alluded to, and has been impressed with the necessity of collecting all of the evidence—both anatomical and clinical—before deciding upon the existence of sarcomatous disease of the uterus. But there will be cases in which a positive diagnosis is impossible, except after months of observation. The subject of fungous endometritis is too wide for discussion here, and Gusserow has summed up the main clinical points of difference between this condition and that of the malignant growth which it so closely simulates. Yet even he acknowledges his inability to draw a sharp line of distinction anatomically.

"The microscopic examination," he says, "of single isolated masses does not lead to a very definite conclusion; we often meet with bits of sarcomatous tissue which are made up of perfectly healthy mucous membrane, and, on the contrary, in cases of simple hypertrophy, with pieces which resemble small-celled sarcoma."

Book Notices.

Hand-book of Vertebrate Dissection. By H. NEWELL MARTIN, D. Sc., M. D., M. A., Professor in the Johns Hopkins University, and WILLIAM A. MOALE, M. D. Part II. How to Dissect a Bird. New York: Macmillan & Co., 1883. Pp. iv-89 to 174, inclusive. [Price, 60c.]

As stated in the preface, the aim of this little book is to enable the beginner to gain a thorough knowledge of the anatomy of the bird, the domestic pigeon being selected as a typical subject. One hundred and twenty pages are devoted to osteology, because of the characteristic nature of the bird's skeleton, the dissection of the muscles, nerves, and special organs occupying the remaining fifty pages. The student of biology will find the

* Chrobak ("Archiv für Gynäkologie," vol. iv, pp. 549-554) mentions a case similar to this, in which a fibroid polypus attached to the cervical canal underwent sarcomatous degeneration. The writer was skeptical as to the possibility of such a change in the present case.

arrangement of the volume similar to that of the hand-books so ably edited by Huxley. We can not too highly commend the modern method of teaching comparative anatomy, wherein the beginner is taught to master the details of a single subject, instead of endeavoring to gain a wider, but superficial knowledge of several. It is only by such work as this that true science can be advanced.

A Manual of Chemical Analysis as applied to the Examination of Medicinal Chemicals. A Guide for the Determination of their Identity and Quality, and for the Detection of Impurities and Adulterations. For the Use of Pharmacists, Physicians, Druggists, Manufacturing Chemists, and Pharmaceutical and Medical Students. Third edition, thoroughly revised and greatly enlarged. By FREDERICK HOFFMANN, A. M., Ph. D., Public Analyst to the State of New York, etc., and FREDERICK B. POWER, Ph. D., Professor of Analytical Chemistry in the Philadelphia College of Pharmacy. Philadelphia: Henry C. Lea's Son & Co., 1883. Pp. 624.

THIS will undoubtedly be a useful work of reference to the manufacturing chemist, though we can hardly conceive that it "supplies a want" of the medical public.

The book can not lay claim to much originality, is uneven in character, and fairly bristles with ponderous and useless chemical formulæ. While we agree with the authors, in the preface to their first edition, as to "the increasing obligations of the pharmacist and the physician," and the need of higher scientific attainments, this volume does not commend itself to us as a practical aid to the latter. The present edition has been enlarged and revised, special attention being given to the sections on toxicology. There are nearly two hundred illustrations, principally of well-known chemical apparatus.

Manuel des injections sous-cutanées. Par BOURNEVILLE, médecin de Bicêtre, et BRICON, docteur en médecine. Paris: Librairie du Progrès médical, 1883. 12mo. Pp. xxxvi-174. [Prix: broché, 2.50f.; cartonné, 3f.]

WE question the need of another hand-book upon this subject, since the literature quoted in the introduction to this monograph is already so extensive.

Following a few practical hints on the different solutions for hypodermic injection, varieties of syringes, etc., is a list of drugs, arranged conveniently in alphabetical order. Of these we conceive that the reader will employ very few. A section upon phenic acid will be read with interest, also a short paragraph on the hypodermic injection of water. The most extended chapters are those on mercury, morphine, quinine, and strychnine.

The book is compact in its general arrangement, the information it contains being presented in the most condensed form.

The Untoward Effects of Drugs. A Pharmacological and Clinical Manual. By Dr. L. LEWIN, Docent of Materia Medica, Hygiene, and Public Health in the University of Berlin. Second edition, revised and enlarged. Translated by J. J. MULBERG, M. D., Professor of Principles of Medicine, Materia Medica, and Therapeutics in the Michigan College of Medicine. The only English translation having the author's indorsement. Detroit: George S. Davis, 1883. Pp. 216-vi. [Price, \$2.25.]

THE subject of this work is one which has received little special notice, if we except chloral, opium, and hashish. Dr. Lewin mentions every important drug in the pharmacopœia,

and devotes special attention to quinine, salicylic acid, pilocarpine, and other drugs which have been much discussed of late. The book is full of valuable information, and should be in the library of every practicing physician.

How to Examine the Chest. A Practical Guide for the Use of Students. By SAMUEL WEST, M. D., M. R. C. P., etc. Philadelphia: P. Blakiston, Son & Co., 1883. Pp. xii-200. [Price, \$1.75.]

THIS work is intended as a practical guide for students, and the effort is made everywhere to put everything in the simplest form. The important points in each article are abundantly emphasized, and diagrams and illustrations are frequently resorted to by way of explanation. To a student who has not time to read much, such a work as this would be very convenient as a manual. The style is good, and in not a few instances the author has succeeded in making descriptions much more intelligible and striking than those of the same subjects in other books.

Electricity in Medicine and Surgery. By GEORGE C. PITZER, M. D., Professor of the Theory and Practice of Medicine in the American Medical College of St. Louis. St. Louis, 1883. Pp. 83. [Price, \$1.]

THIS work is very short and simple, and seems to be intended for those who have never studied electricity, and who wish merely to learn enough about batteries to employ them to some extent in practice. The larger part of the work is taken up in describing different forms of electrical apparatus, and how to use them. A short summary is appended of diseases which are likely to be benefited by the use of electricity. A few cases are also detailed as illustrating results which may be expected to follow treatment with electricity.

BOOKS AND PAMPHLETS RECEIVED.

A System of Surgery, Theoretical and Practical, in Treatises by Various Authors. Edited by T. Holmes, M. A. Cantab., Surgeon to St. George's Hospital, etc., and J. W. Hulke, F. R. S., Surgeon to the Middlesex Hospital, etc. Third edition, in three volumes, with illustrations. New York: William Wood & Co., 1883. Pp. xxxi-1,109; xxiv-964; xxix-942.

The Lettsomian Lectures on the Treatment of some of the Forms of Valvular Disease of the Heart. Delivered before the Medical Society of London. By A. Ernest Sansom, M. D. Lond., F. R. C. P., Physician to the London Hospital, etc. Philadelphia: P. Blakiston, Son & Co., 1883. Pp. 93. [Price, \$1.25.]

The Control of Defective Sight on Land and Sea, with Especial Reference to the Subject of Color-Blindness. A *Résumé* of what has been done in this Country and Abroad toward arriving at Proper Legislative Action. Reprinted from the "Railway Review." Chicago: Willard A. Smith, 1883. Pp. 48.

Fifth Annual Report of the State Board of Health of the State of Rhode Island, for the year ending December 31, 1882, and including the Report upon Births, Marriages, and Deaths in 1881. Providence, 1883. Pp. vii-327.

Fourth Annual Announcement of the College of Physicians and Surgeons, Boston. Session of 1883-1884.

DYSPNEA FROM THE USE OF SALICYLIC ACID—Dr. Louvain, of Carlsbad, has met with several cases in which difficulty of breathing was due to the administration of moderate doses of salicylic acid; the breathing was labored and rapid.—*Boston Med. and Surg. Jour.*

THE
NEW YORK MEDICAL JOURNAL,
A Weekly Review of Medicine.

Published by
D. APPLETON & Co.

Edited by
FRANK P. FOSTER, M. D.

NEW YORK, SATURDAY, JULY 21, 1883.

THE "DOC."

ANTHROPOLOGISTS have sadly neglected one of the most interesting types of the medical man, namely, the "doc." So marked are his characteristics, nevertheless, that he may be said to constitute a species, and one of great importance to a correct shaping of our notions of development. Ontogenists and phylogenists may contend as they like over the origin of species in general, but in the case of the "doc." a positive statement may be made showing what is at once the key to his character and the determining cause of his differentiation as a species. That statement is this: Most medical men have on one occasion or another been addressed as "doc." Such a salutation always comes from the vulgar. The ordinary man is annoyed, and feels half-inclined to show resentment, when so addressed; but, reflecting that no insult is intended, but that the term is rather meant as one expressive of a degree of familiarity to which the speaker aspires to be admitted, and one by which he is feeling his way, as it were, the individual to whom the title is applied tempers his anger to toleration, but frowns unmistakably upon his interlocutor's advances. Not so the "doc."; he positively relishes the appellation, and by showing his gusto not only evinces that he has been fittingly addressed, but proclaims himself possessed of the characteristics that make it impossible for him to be anything but a "doc."

The "doc." bears the same relation to the doctor that the "gent." bears to the gentleman. Neither of these diminutives is ever applied with the faintest approach to propriety to an individual at all above shabby gentility, and as a general thing they stand for characteristics much lower in the scale, attaching to persons hovering on the outskirts of respectability. We might, indeed, adopt "gent." as a generic term, the genus to include the medical species.

Shut out as the "doc." is from refined society, he betakes himself to haunts and devices peculiarly his own. Ostensibly living by the practice of medicine, and really trying in his feeble but offensive way to make that pursuit bring in something to aid in sustaining his valuable life, his necessities are actually met by shifts for which he is better fitted, and for which he seems to have a decided bent. But, little as medicine counts for among the "doc.'s" resources, it is with the manner in which he handles it that we are interested, rather than with what else pertains to his course of life.

"Docs." are of high and of low degree. Some specimens succeed in keeping up appearances fairly, while occasionally one is met with so put to it as to have his office "under his hat." The "doc." is proud of belonging to the profession, and never loses an opportunity of letting his light shine before men,

penny-dip that it is. He usually has a diploma, and he is careful to hang it conspicuously in his office. Let a chance remark be made in his hearing concerning some case of sickness, and he will at once, and without waiting for the formality of an introduction, proceed to deliver himself of any number of wise comments, all going to give the impression that it would be well to secure his connection with the case. If he happens to meet a stranger afflicted with some visible infirmity, he makes the matter the subject of conversation, apparently unconscious that he is taking a liberty. A wen or a fatty tumor is to him a veritable *bonne bouche*; he has no hesitation in handling it, and makes no pretense of concealing his eagerness to relieve the afflicted individual. These overtures, it is true, rarely end in anything to his advantage, but there are occasions on which he fairly hits the bull's-eye; any street accident, for instance, gives him an opportunity to play the oracle before the motley group that soon gathers, to hand his card to the newspaper reporters, and possibly to collect at least one fee.

The "doc." is obtrusive and loud-spoken, and apt to be both profane and obscene. Hence it is in the highest degree annoying to a doctor to be accosted by him in any public place, for the "doc." is sure to broach medical matters, and that, too, with a mixture of coarseness and levity peculiarly trying to the person addressed, who can not shake off a certain nervous dread lest the strangers present, who have heard him called by name, and have pricked up their ears out of morbid curiosity concerning the topic touched upon, should, in spite of all the dignity and reserve he can call to his aid, judge him by the company he keeps. A street-car is a favorite place for the "doc." thus to torture his victim. There is no possibility of escape, short of breaking the continuity of one's journey, involving, perhaps, failure to keep an appointment.

There are other unlovely features about the "doc.," but in the main he is a harmless being. His existence is none the less an opprobrium, however, and it is to be hoped that the day is not far distant when a State examination, or some equivalent obstacle to the indiscriminate equipment of human beings with the degree of doctor in medicine, shall gradually put an end to the species.

THE MEETING OF THE BRITISH MEDICAL ASSOCIATION.

At the annual meeting of the British Medical Association, to be held in Liverpool on the 31st of this month and the 1st, 2d, and 3d of August, worthy addresses will doubtless be given in the various leading branches of medicine, but, judging from the list of papers that have been promised, we fear that as a whole the meeting will scarcely be as interesting as usual. Perhaps the unattractiveness of Liverpool counts for something in the matter.

There is no doubt, however, that some of the papers will be well worth listening to. In that category we should place a paper on Spastic Paralysis, by Dr. A. Hughes Bennett; a note on the Mechanism of the Cheyne-Stokes Respiration, by Dr. Byrom Bramwell; a paper on Headache, by Dr. T. Lauder Brunton; one on Early Tapping in Cases of Ascites, by Dr.

Austin Flint, of New York; one by Dr. William Strange, on Sporadic Septicæmia; one on Roux's Amputation at the Ankle, by Mr. T. H. Bartlett; one on Amputation by Oblique Circular Incision, by Mr. James Hardie; one on Plaster-of-Paris Bandages in the Treatment of Recent Fractures, by Mr. Christopher Heath; one on Osteotomy, by Dr. Rabagliati; one on Shortening of the Round Ligaments for the Cure of some Forms of Uterine Displacement, by Dr. William Alexander; one entitled Are Diseases of the Ovary (especially Cystoma) on the Increase? by Mr. Lawson Tait; one on Diseases and Injuries to Health attributed to Vaccination, by Mr. M. D. Makuna; one on Hospital Construction, by Captain Galton; a note on Congenital Aortic Bands, by Dr. R. S. Archer; a paper on the Chemical Constituents of the Brain, by Dr. J. L. W. Thudichum; one on Ulcers of the Cornea, by Mr. G. A. Critchett; one on the Transference of Conjunctiva from the Rabbit to the Human Subject for the Cure of Symblepharon, by Dr. John R. Wolfe; one on the Alliance of Rheumatism and Chorea, by Dr. O. Sturges; and one on the Prognosis of Chronic Non-suppurative Inflammation of the Middle Ear, by Dr. P. McBride.

Moreover, several important discussions are announced, including one on Aphasia, to be opened by Professor Gairdner, of Glasgow; one on the Causes and Consequences of Abnormal Tension in the Arteries, to be opened by Dr. Broadbent; one on the Nature of Purpura, to be opened by Dr. Stephen Mackenzie; one on the Surgery of the Kidney, to be opened by Mr. Clement Lucas; one on the Treatment of Intestinal Obstruction; one on Total and Partial Removal of the Uterus for Malignant Disease, to be introduced by papers by Professor Schroeder, of Berlin, and Dr. Wallace; one on the Operative Treatment of Fibrous Tumors of the Uterus, to be introduced by papers by Dr. Keith, Mr. Knowsley Thornton, and Mr. Lawson Tait; one on "Metria," to be introduced by a paper by Dr. Atthill; one on Micro-organisms in Disease, to be opened by Dr. Dreschfeld; one on Cerebral Localization in Relation to Psychological Medicine, to be opened by Mr. Bevan Lewis; and one on the Ætiology and Pathology of Summer Diarrhœa, to be opened by Dr. Ballard.

If, with such an array of papers and discussions that are likely to prove noteworthy—and the list here given does not by any means include all that promise to be profitable—we have ventured to question whether the meeting will come quite up to the standard, that very doubt shows our recognition of the superlative excellence of the association's annual meetings as a general thing. The least interesting of them, indeed, looking back upon them for many years past, have been of a character to do credit to the profession in any country.

THE MORAL ASPECT OF ENFORCED STERILITY.

ELSEWHERE in this issue the reader will find a letter from Dr. Q. Cincinnatus Smith, of Austin, Texas, which seems to call for some notice, inasmuch as the writer charges this journal with inconsistency. Referring to the number for June 30th, he says: "On page 715 . . . we are told what a terribly wicked thing it is to prevent conception, etc.; then, again, on page 728,

we are told that a certain 'unfortunate woman became pregnant again, although warned of the danger,' etc."

In the editorial article from which Dr. Smith makes his first quotation the view was put forward that the prevention of conception was morally on a par with the production of abortion; the article containing the passage next quoted by him was taken from the "British Medical Journal," and credited to that journal. In the editorial article in question it was not thought necessary to state in so many words that it was to the prevention of conception for other than medical reasons that reference was intended, for certainly no careful reader could fail to see that such was the case; in the "British Medical Journal's" article, on the other hand, the author evidently "warned" his patient in order that she might escape the grave infliction of albuminuric retinitis. The two cases are in no wise parallel; there is a vast difference between the conduct of a medical man who connives at a cold-blooded series of outrages on nature, simply to suit the wishes or the fancied necessities of those who would dance without paying the fiddler, and the course to which a physician's own conscience impels him, in order to save his patient from serious bodily harm, although the act may be the same in both instances. The contrast is as great as between the careful performance of paracentesis pericardii for sufficient cause and the indiscriminate stabbing of men in the heart. Such being the case, it is not easy to see how any inconsistency has been shown on the part of this journal; but of that our readers are abundantly able to judge.

Our correspondent's allusions to "priestcraft" and "homilies" seem to warrant the interpretation that he seeks for no light on the moral aspect of the question at issue, having decided that for himself. That he was at perfect liberty to do, of course, and, were this journal published solely for his edification, the relations of morality to the practice of medicine would never again be touched upon in its columns. Such does not happen to be the case, however; and, since there is good reason to believe that, with very few exceptions, the members of our profession entertain the most settled purpose to make their practice conform to the requirements of a conscientious sense of duty, the journal, while not seeking to control any man's conscience, and still less to decoy him into the toils of "priestcraft," feels itself perfectly warranted in dealing with medical matters in their moral as well as their material bearings, even at the risk of finding its observations treated as "homilies and anathemas."

There is one thing, however, that we shall not do; and that is, to give information as to the ways and means of preventing conception, however many women there may be who "bear children more frequently than is for the good of any and all parties concerned." Neither shall we suffer the journal to be drawn into any discussion of the matter on the basis laid down by our correspondent.

THE MEDICAL STUDENT'S SUMMER WORK.

IN view of the work still before them, in order that they may acquit themselves with credit when they come up for examination, it is scarcely to be supposed that many of our medi-

cal students are spending the hot months in complete idleness. It is rather to be feared, indeed, that the great majority of them, even of those who are so fortunate as to find themselves in the country, are still buried under their text-books, keeping up the accursed cramming process. To those who are thus engaged we would suggest that they might reap much more benefit, in several ways, by breaking the continuity of their work for a time.

Under most circumstances the incessant study of books is not in the highest degree conducive to solid mental progress. To be sure, it may carry a man through an examination for the degree, but it clogs his real advance in knowledge, for available knowledge is quite a different thing from the mere possession of a stock of recorded facts and accepted dicta. To say nothing of critical reading, the crammer can not even take time to connect his fragmentary facts properly. He gets the husk of knowledge—a sort of dress-parade affair, but the kernel eludes him.

Many students are the gainers by shunning books altogether at times. It does not follow that the subject of study should be utterly dropped from the mind. As a matter of fact, no true student can drop it, but he can vary his method of working at it, and often to most striking advantage. There is a faculty that may be called mental rumination—the power to call up an obscure aspect of the matter in hand at odd times, repeatedly but at reasonable intervals, and on some one of these occasions what had before seemed unintelligible is suddenly lighted up by some collateral consideration, and the mystery disappears. This, as Professor Carpenter has so pleasantly told us, is the work of the automaton, and may be made a most efficient ally of voluntary mental labor.

There are others who can not keep away from their books, who feel in the attempt not so much rest as deprivation. Even these persons, although no hard and fast rule should coerce them into doing violence to the peculiar cast of the mental make-up, are likely to find it advantageous to turn their system of study somewhat aside from its accustomed channel. Let them, for example, cease reading in continuity, and go to comparing the writings of different authors on some particular phase of the subject. In this way, although less ground will have been gone over, more will really have been covered.

But, for all classes of students, in one way or another there should be some relaxation of routine work. One of the best devices for bringing this about, at the same time avoiding the shifts of the idler, seems to us to lie in experimental study. There are few matters treated of in the medical curriculum that the student can not find it in his power to subject to the light of personal investigation. The natural sciences will afford him ample hints. By following such a course the student is not likely to arrive at truths that he could not have got from books, but he will at least fix them in his mind indelibly, and he will grasp their bearings more unerringly than if he had taken them from the printed page.

MINOR PARAGRAPHS.

CHOLERA.

DURING the week that has elapsed since the account given in our last issue was prepared, the disease has spread in a number of directions in Egypt, but the mortality at Damietta, the scene of its first outbreak, has rather diminished. It has reached Cairo, and a few doubtful cases are reported from Alexandria, which latter place the sanitary officials decline to isolate, perhaps because a number of the cordons already established have become infected and therefore practically useless. The Spanish government seems to have entered on the policy toward England that was alluded to last week, having, it is announced, instituted a system of compulsory sanitary inspection of all vessels arriving at Spanish ports from England. The Turkish government has revived the regulations enforced in 1867, quarantining all vessels from Egypt arriving at Smyrna and Beirut, and absolutely closing all other Turkish Mediterranean ports to them. At Gibraltar a quarantine of twenty-one days on all arrivals from Egypt is in force.

At San Francisco a strict enforcement of quarantine has been ordered against all vessels that have cleared from or touched at ports infected with cholera, small-pox, or yellow fever. A bark from Egypt, laden with rags, is reported to have proceeded to New Haven, Conn., after having been discharged from quarantine at New York. The New Haven authorities prohibited any communication between the vessel and the shore for a time.

M. Pasteur has proposed an organized investigation of the nature and origin of the outbreak in Egypt, and has asked the British Foreign Secretary for facilities in carrying out the plan.

YELLOW FEVER.

It turns out that the steamship *City of Mexico*, which has arrived at this port from Havana, had had no cases of yellow fever on board, as it was supposed she had. The health authorities of the port of New York having been informed by the Surgeon-General of the Marine-Hospital Service that the steamship *City of Alexandria* was bound here from Vera Cruz, after touching at Havana on Saturday, and leaving three patients with the disease there, the vessel was subjected to a rigid examination on her arrival, but it was found that there had been no cases of the disease on board during the trip from Havana. The cargo is being discharged at Upper Quarantine, and the vessel will then be cleansed and fumigated.

GLANDERS IN ILLINOIS.

It will be a source of great regret if the report proves true that the State Veterinarian of Illinois is meeting with legal opposition to his energetic and enlightened manner of dealing with the epidemic. By the efforts of the State Board of Health he had been clothed with powers that were thought to be equal to the occasion, namely, an extension of the provisions of the Pleuro-pneumonia Act to cover the matter of glanders; and a sufficient appropriation had been placed at his disposal. As the disease is said to exist in nineteen counties, no factious opposition to its prompt suppression ought to be tolerated.

MAGICAL MEDICINE IN MICHIGAN.

An inquest held on the body of a child that was lately found dead in Michigan brought out the following story of the way in which a quack had undertaken to cure the child of epilepsy:

"He put something in a jug, kept it in the stove over nine

days, and, after wiring the cork in the jug, sunk it in the river. He also wrote two pages of note-paper full, folded it in a three-cornered shape, representing, as he said, the Trinity, sewed it in a three-cornered bag, and, attaching strings to it, tied the same around the child's neck, where it was kept until it died. His 'magic cure' was written in German, and the following is a literal translation: 'William John Warner will regain his health in the name of the Lord, God Father, God Son, and God Holy Ghost, Amen. † † † I. N. † N. I. † (interpreted Jesus of Nazareth, Nazarene Jesus). Beelzebub and all the bad spirits, I forbid you my bedstead, in the name of God, my house, and also my yard; I forbid you, in the name of the Holy Trinity, my blood and flesh, my body and soul. I forbid you as many times as we have nail-holes in my house, as many times as drops in the water, as many times as leaves on the trees, as many times as stars in the heavens, until the last days of judgment arrives, and Mary, the mother of God, gives birth to her second son. In the name of God Father, God Son, and God Holy Ghost. Amen. Thou arch fiend, thou has taken hold of our William John. Get thee hence. Let the worms go out of your body, and your marrow and bones are [sic] again. I beseech you, for the sake of the five wounds of Jesus Christ, get out this very hour.'

A CHINESE DISEASE IN BRITISH COLUMBIA.

A REPORT from Victoria, B. C., states that many Chinamen were lately landed there suffering from a strange and speedily fatal form of disease, "the result," says the dispatch, somewhat dogmatically, "of an almost exclusive consumption of decomposed vegetable food." The onset is said to be characterized by pain and loss of power in the feet. The paralytic condition creeps up to the trunk, blebs appear about the mouth, and symptoms of blood-poisoning ensue.

FEEES FOR CORONERS' AUTOPSIES.

ON Tuesday of this week an inquest on the body of a child that had died in Paterson, N. J., from opium poisoning, it was thought, was brought to a standstill by the coroner's inability to find a physician who was willing to make the autopsy for ten dollars. It seems that the Board of Freeholders will pay no more than that sum. The suspected poisoning is attributed to an apothecary's error in renewing a lot of powders that had been prescribed by Dr. E. J. Marsh.

BRUTALITY IN A LUNATIC ASYLUM.

THE asylum at Norristown, Pa., was lately the scene, according to the newspapers, of an unusually brutal assault committed upon a patient by an attendant. Two accounts of the affair are given, the superintendent alleging that the patient first struck the attendant. Be this as it may, it is difficult to understand why no steps were taken to secure the attendant's legal punishment instead of simply dismissing him.

AN OUTBREAK OF ANTI-VIVISECTION BIGOTRY IN PARIS.

ACCORDING to our Paris exchanges, a scene took place on the 22d of May at Professor Brown-Séquard's amphitheatre at the College of France. Toward the close of his practical course, M. Brown-Séquard had begun a series of experimental demonstrations to illustrate the new facts of which he had previously spoken. It is well known that he has discovered that general analgesia, without loss of tactile sensibility, may be produced by irritating the laryngeal mucous membrane with

carbonic acid or the vapor of chloroform, certain precautions being taken to prevent the entrance of these substances into the lungs. He was preparing to test the sensibility in a little monkey that had been subjected to an experiment of this sort three days before. A few minutes before the lecture, he was about to cut the sutures in a wound near the larynx in this monkey, when a young woman gave him a blow on the fingers with her umbrella. Being asked to withdraw, the girl refused to do so, declaring that by virtue of the Grammont law she had the right to prevent any cruelty to an animal in a public place. M. Brown-Séquard resumed his manipulation, and the woman tried to strike him again, but this time her umbrella was wrested from her before she could give the blow. A policeman was called, and took her before the commissioner of the locality, where a complaint was entered against her by two witnesses of the scene.

The story got into the newspapers that M. Brown-Séquard was intending to cut the vocal cords, "to prevent the poor beast's frightful cries," whereas that was the last thing he would have thought of doing, since to assure himself whether the monkey could feel pain was the very object he had in view. Moreover, the monkey had not cried at all, although its sensibility had been regained.

As a counterpart to this incident, the following Tuesday, M. Brown-Séquard having taken *the utility of vivisections* as the subject of his lecture, the amphitheatre proved too small to hold his hearers, and he unfolded his theme before a select audience, the only interruptions being those occasioned by repeated applause and evident marks of the most active sympathy.

THE LYMPHATIC RADICLES AND THE CAPILLARY BLOOD-VESSELS.

THE well-known anatomist, M. Sappey, lately made a most interesting communication to the French Academy of Sciences in which he described a method of investigation that he had resorted to in studying the question of a communication between the capillary blood-vessels and the radicles of the lymphatic system. We find the following abstract of M. Sappey's note in the "Gazette hebdomadaire de médecine et de chirurgie": The process consists in imparting a straw-color to the transparent walls of the "*capillicules*" and the *lacunæ*, so as to make them plainly visible. This is accomplished by filling their cavities with a multitude of organisms belonging to the lowest class of cryptogams. If microbes proliferate rapidly in the lymph plasma, they proliferate no less rapidly and abundantly in the blood plasma. To make their presence answer the purpose, it was important that they should show themselves in the lymphatic capillaries exclusively, and not at all in the capillary blood-vessels. This result was secured by injecting an acidulated liquid into the blood-vessels, in sufficient quantity to drive out their contents; in other words, a solution in which microphytes can not proliferate was substituted for the blood plasma so favorable for their development. Under these conditions no trace of a microzyme is observed in the capillary blood-vessels. On the other hand, the lymphatic radicles, filled with colored cells, appear alone in the field, and they are shown with such nicety that it becomes easy to study them collectively, in their minutest details, and in all their infinite varieties. Studying the question in this way, M. Sappey reaches the conclusion that we can not admit a communication between the two sets of vessels, but that the lymphatics are everywhere closed at their origin, any penetration of blood plasma into the lymphatic radicles being the mere result of transudation or of capillarity, with some slight modifications.

THE COMMITMENT OF LUNATICS.

THE carefully prepared bills on lunacy legislation, which were brought before the Legislatures of New York and Pennsylvania during last winter, show how aroused public sentiment has become to the need of a change in the present modes of commitment and discharge. The fact that neither the lunacy reform bill nor that relating to the coroner's office passed the Legislature of this State does not show any weakness in the bills themselves, but merely demonstrates the unwillingness of politicians to carry through measures which are absolutely non-partisan and from which no pecuniary gain can be made. It is noticeable that in France there is at present an agitation in favor of a change in the mode of commitments of the insane. Since 1838 it has been possible to confine any person in an asylum on the simple certificate of a physician. This easy mode of disposing of persons objectionable for any reason to their friends or relatives has naturally led to abuses. The Minister of the Interior has now recommended changes in the law so that such commitment can only last until the proper legal officer has examined into the case. When the commitment is made, the physician must furnish a full report of the case, detailing the symptoms and progress of the malady. This report, together with a further one made by the Superintendent of the Asylum, is to be forwarded to the Prefect of the Department and to the *Procureur de la République* for the Arrondissement where the patient resides. This official, assisted by a physician chosen by himself, must within three days make a personal examination of the person said to be insane, and his written order is the warrant for the further detention of the patient or for his discharge. The whole proceeding must be completed within a month, so that, if the patient is declared to be sane, he shall not be deprived of his liberty for any length of time.

PARALYSIS IN CONNECTION WITH THE LOSS OF A LIMB.

M. BOURDON, of Paris, has devoted a good deal of study to the question of the effects of total cessation of functional activity of a part, as exemplified in cases of the loss of a limb by amputation, on the motor zone of the cerebral cortex. At a recent meeting of the *Académie de médecine* he added another observation to the six that he had previously embodied in a memoir on the subject, all going to show that atrophy of the superior part of the motor zone may be the result. In this seventh case, that of a person who had lost an arm, there was paralysis of the leg on the same side. The paralysis was slow in its development, and was not accompanied by any cerebral symptom, wherefore M. Bourdon suggests that it may have been due to an extension of the atrophic process. Such a feature was not observed in the six other cases, and, as the patient was advanced in years, it was remarked that cerebral atrophy, an affection somewhat common in old people, might have development without any connection with the loss of the limb.

THE RESPONSIBILITY OF INSANE CRIMINALS.

ATTACHING all due weight to the doctrine of moral insanity as affecting responsibility for criminal acts, and utterly denying the justice of the old legal test of a knowledge of right and wrong, many reflecting persons are coming more and more to look upon the majority of the insane as to some extent responsible for their conduct, since they are manifestly controlled in some measure by ordinary impulses acting in opposition to their insane propensities. We are glad to see that such considerations as these were brought forward by Dr. Everts, of Cincinnati, in a paper read before the recent meeting of the American

Association of Medical Superintendents of Asylums for the Insane, held in Providence. The knotty point to be settled in individual instances is as to the degree of responsibility. No greater field of usefulness seems to us to open before our alienists than the investigation of this problem.

A NEW JOURNAL OF PÆDIATRICS.

THE new "Revue mensuelle des maladies de l'enfance," the issue of which was begun this year, constitutes a most important addition to our periodical literature of the specialties. Its scope includes hygiene, medicine, surgery, and orthopædics. It is published by M. Lauwereyns, of Paris, and edited by M. Cadet de Gassicourt and M. de Saint-Germain, assisted by MM. Abadie, Archambault, Balzer, Bergeron, Blache, Descroizilles, D'Heilly, Fieuzal, Guéniot, Labric, Lannelongue, Moizard, Onimus, Sevestre, Jules Simon, and Tarnier, M. Pierre J. Mercier acting as secretary of the staff. Each monthly number consists of forty-eight octavo pages.

The July number contains an article on feeding by means of the stomach-tube after tracheotomy, a paper on the diagnosis of retro-pharyngeal and congestive abscesses, and a report of the nursery department of the *Hôpital de la Conception* at Marseilles. Besides these formal contributions, there are several important abstracts. The "Revue" makes a handsome appearance, and can scarcely fail, we should think, to find favor with the profession in France.

NEWS ITEMS.

A SUSPECTED CHARITY.—An organization styled the New York Medical Aid and Relief Society for Destitute and Sick Women and Children, of which an eclectic practitioner, one Dr. W. J. Bryan, seems to be the active official, is likely to be subjected to a rigid investigation by the State Board of Charities. The most noteworthy "irregularity" alleged against the concern is that of using men's names in its list of trustees without authority.

AN ALLEGED ABORTIONIST.—Dr. Charles A. Heintze, of Philadelphia, against whom his wife has brought charges of desertion and adultery, is also charged by her with having led the career of a criminal abortionist. He is said to be a graduate of the University of Berlin, and also of a homœopathic college in this country.

AN AMATEUR ABORTIONIST.—A man now under arrest at Waterbury, Conn., charged with having caused the death of his sister by malpractice, is described as "a peddler with a fondness for medical reading."

THE UNIVERSITY OF MARYLAND.—According to the "Maryland Medical Journal," Dr. L. Ernest Neale has been appointed Demonstrator of Obstetrics.

A MALIGNANT OUTBREAK OF MEASLES is reported as having appeared at St. Mary's Industrial School for Boys, near Baltimore, causing the death of ten of the four hundred and twenty inmates in the course of five days.

THE AMERICAN OTOLOGICAL SOCIETY.—At the annual meeting, held at the Hotel Kaaterskill, at the Catskill Mountains, on Tuesday, the 17th inst., the following-named gentlemen were elected officers for the ensuing year: President, Dr. Charles H. Burnett, of Philadelphia; Vice-President, Dr. J. S. Prout, of Brooklyn; Secretary and Treasurer, Dr. J. J. B. Vermyne, of New Bedford, Mass.; Committee on Membership, Dr. John Green, of St. Louis; Dr. H. G. Miller, of Providence; and Dr. Arthur Matthewson, of Brooklyn.

ST. PETER'S HOSPITAL, ALBANY.—We learn from the "Medical Annals" that Dr. George S. Munson has been appointed one of the ophthalmic and aural surgeons to the hospital.

MEMENTOS OF JOSEPH PRIESTLEY.—The astronomical, philosophical, and chemical apparatus used by Dr. Priestley have been given to the Smithsonian Institution at Washington.

CHINESE MEDICAL STUDENTS.—The "British Medical Journal" states that the Emperor of China has received the permission of the government of India to send a certain number of youths to India with a view to their studying European medicine and surgery at the medical colleges.

THE STATEN ISLAND EPIDEMIC OF PLEURO-PNEUMONIA is said to have killed over two hundred cattle during the last three weeks.

THE HARVARD VETERINARY HOSPITAL, in Boston, will probably be completed about the 1st of August.

THE REGISTRAR OF THE ROYAL COLLEGE OF PHYSICIANS, Dr. H. A. Pitman, is reported to have been knighted.

OBITUARY NOTES.

THE REV. CHARLES W. CALHOUN, M. D., OF SYRIA.—Dr. Calhoun, a graduate of Bellevue Hospital Medical College, and a medical missionary under the Presbyterian Board of Foreign Missions, has just died at Sheveifat, Mount Lebanon, Syria. About a year since, the Turkish authorities at Tripoli pulled down the sign over his office, and since then he has practiced mainly among the villages in the surrounding country. The American Minister at Constantinople has demanded redress for the insult, and the news of this action came almost at the same moment with the tidings of Dr. Calhoun's death. Being a native of Syria, Dr. Calhoun had an intimate acquaintance with the language and habits of the people, so that he had very easy access to their homes. He was much beloved by his associates among the missionaries, and it will be hard to fill his place.

BENJAMIN MUSSER, M. D., OF STRASBURG, PA.—Dr. Musser died last Saturday, in his sixty-third year. His progenitors, for several generations back, were physicians, and a son of his is now a well-known practitioner in Philadelphia. The deceased gentleman was a member of the Medical Society of the State of Pennsylvania.

THOMAS H. SCOTT, M. D., OF PETERSBURG, VA.—Dr. Scott died at his home in Petersburg on Wednesday, the 11th inst., at the age of eighty. He was a nephew of General Winfield Scott, a member of the Virginia State Medical Society, and a man of reputation beyond the limits of his State.

Proceedings of Societies.

NEW YORK SOCIETY OF GERMAN PHYSICIANS.

A STATED meeting was held March 24, 1882, Dr. EMIL GRUENING in the chair.

OSTEOPLASTIC EXSECTION OF THE SUPERIOR MAXILLA.—Dr. GERSTER introduced an elderly woman, on whom he had performed this operation for infra-orbital neuralgia. The patient complained frequently of pain in different parts of the body, but the left infra-orbital region was the site of her chief trouble.

At one time she had all her teeth extracted, but obtained no relief. On examination, the doctor found a fistula leading into

the antrum; the mucous lining of this cavity appeared normal. With the exception of slight modifications, the operation was done in the same manner as the one reported in a recent number of these transactions.

The drainage-tube in the spheno-maxillary fossa was dispensed with and primary union secured.

The patient subsequently complained of pain in the right nostril.

Dr. A. JACOBI said that severe and persistent neuralgia might indicate a central lesion, infra-orbital neuralgia being occasionally the first symptom of disease of the cord.

An operation should not be resorted to in cases admitting of much doubt as to the peripheral or central origin of the pain.

Dr. G. W. JACOBY stated that he saw this patient at the German Dispensary, when she complained of neuralgia in both sides of the face, which he attributed to constitutional disease. He met her again after the operation, but did not find her improved, according to her statement.

FOREIGN BODY IN THE FOREARM.—Dr. GERSTER introduced a young man who had received a stab with a knife in the volar aspect of the forearm near the carpus, in the autumn of 1880.

The wound healed in a short time, and gave no trouble until a week ago, when the arm became painful. An incision was made and a knife-blade 3" long removed, which the man, who was a laborer, had carried in his arm two years without his knowledge and without complaint. Dr. Gerster remarked that such cases proved to him the truth of the assertion that simple mechanical irritation of sound tissue would not produce inflammation. Irritation must always be accompanied by infection in order to produce inflammation.

Dr. JACOBI remarked that he was not prepared to accept this theory of inflammation. A foreign body, taking a position parallel to the fibers of the tissue in which it was imbedded, might not be a source of active inflammation, but, when introduced transversely, so as to irritate the tissues, an inflammatory reaction would ensue without the agency of infectious matter.

Dr. GERSTER would explain these facts by assuming the presence of infectious matter in the body of some individuals.

Dr. JACOBI said he was familiar with this theory, and that no convincing testimony had yet been offered in its favor.

DIABETES.—Dr. B. SCHARLAU had had under his care a man, sixty years old, whose urine, in October, 1880, showed a specific gravity of 1.030, and contained a high percentage of sugar. The patient subsisted on a strict milk diet for six weeks, after which a specific gravity of 1.010 was noted, and not a trace of sugar found. From December 24, 1880, to March 12, 1882, on which day the last test was made, the urine was absolutely free from sugar, although the patient during that time had partaken liberally of all kinds of food and drink.

Dr. JACOBI also remembered two or three cases in which the sugar disappeared after a strict milk diet. No medicines were administered at the time.

LEPTOTHRIX IN TONSILLAR CONCRETIONS.—Dr. E. GRUENING had recently cut into a swelling, located at the inner angle of the eye, in a girl fourteen years of age, and removed therefrom about ten small, hard stones, which contained numerous elements of leptothrix when examined under a microscope. He remembered having seen eight such cases in his practice.

Leptothrix could readily get into the eye with the saliva. The tonsils and pharyngeal mucous membrane frequently contained such concretions, consisting, according to the books, of epithelium, lime, and cholesterol.

Dr. Gruening examined a large number of these stones, taken from fifty different individuals, and in every specimen he

found the matrix and mycelium of leptothrix. He thought, therefore, that the follicular pharyngitis of Mackenzie, or the pharyngeal seborrhœa of Storek, was nothing more than an invasion of leptothrix into the follicles of the mucous membrane. [For a complete account of these investigations, *vide* "Archives of Laryngology," April, 1882.]

Dr. JACOBI said that stones were found in follicles which had been inflamed, and the semi-solid contents of such a follicle gradually became hard. Such stones might contain the elements of leptothrix, but he did not think that their formation was entirely due to this form of algæ, and would refer to preputial stones as a direct evidence of the contrary.

RENAL CALCULI IN THE NEW-BORN.—Reported by Dr. A. JACOBI.—In one case the child was only ten days old when symptoms of difficult micturition were noticed, and in another case an infant passed blood soon after birth—the first urine being voided forty-eight hours later—and a reddish, gritty mass was found in the diapers. In both cases the bladder was examined for stone, etc. The doctor stated that he had detected six cases of congenital renal calculi in forty autopsies, and believed that many cases of so-called intestinal colic occurring in children were in truth cases of renal colic. The passage of a calculus was frequently accompanied by hæmorrhage and followed by secondary nephritis.

A. CAILLÉ, M. D.,

Secretary pro tem.

A STATED meeting was held April 28, 1882, Dr. E. F. SCHWEDLER in the chair.

GOUT.—Dr. H. G. KLOTZ introduced a man, fifty-two years old, whose fingers were studded with a number of tumors varying in size. The patient said he had been a moderate drinker, and had never had syphilis. He remembered that he had been severely sick with typhoid fever many years before, and in 1863 suffered from articular rheumatism, uncomplicated with cardiac disease. During the past fifteen years he had been employed in a gas-house, and he first noticed a swelling of the phalangeal joints in 1873. At the present time the tumors varied in size from that of a filbert to that of a walnut; they were soft to the touch, and consisted of a firm capsule connected with the tendon sheaths, surrounding a whitish, putty-like mass, which was composed, as shown by the microscope, of fine needles and very little fat. The patient's condition had not improved much under the administration of colchicum, with potassium iodide and sodium salicylate.

Dr. A. G. GERSTER alluded to a similar intractable case, at one time under his care, in the person of a man of twenty-six, an immoderate beer drinker, whose parents had likewise suffered from gout. He became first afflicted with articular rheumatism in 1831, and suffered much from effusion into the knee and elbow joints. Even the tendon sheaths and muscular insertions were involved, and occasionally all the smaller joints became tumefied. No improvement followed the administration of internal remedies. When mercurous iodide was given, the severity of the symptoms seemed to increase; finally, the employment of baths and general massage was followed by slight improvement, although the joints still continue to be troublesome.

LEAD PARALYSIS.—A patient was presented by Dr. SEESSEL. He was a man of fifty. All the extensor muscles were involved, the supinator muscles being free; there was marked thenar atrophy. After two sittings with the faradaic current, great improvement was noticed. Hitzig claimed to have found intumescence of the blood-vessels in saturnine paralysis; the muscles usually showed degenerative reaction in response to the faradaic current, and in some cases degeneration of the large cells in the anterior horn had been observed.

Table showing the difference between Lead Paralysis and kindred Nervous Disorders.

<i>Lead Paralysis.</i>	1. Paralysis precedes atrophy.
	2. Extensor muscles only affected.
	3. Muscles show degenerative reaction.
	4. Large cells in anterior horn degenerated.
<i>Progressive Muscular Atrophy.</i>	1. Atrophy of muscles precedes paralysis.
	2. Large cells in anterior horn degenerated.
<i>Amyotrophic Lateral Sclerosis.</i>	1. Paralysis precedes atrophy.
	2. All the muscles of the body are affected.
	Associated with rigidity of joints, bulbar paralysis, and rapid lethal termination.
<i>Poliomyelitis Anterior.</i>	Almost identical with lead paralysis.
	1. Extensor muscles only involved.
	2. Muscles show degenerative reaction.
	3. Histological appearance same as in lead disease.

Dr. H. J. GARRIGUES exhibited a specimen of ABNORMAL DISPOSITION OF THE PLACENTA.

[This case was described by Dr. Garrigues in "The New York Medical Journal," vol. xxxvi, p. 258.]

A KOPROLITH was presented by Dr. A. JACOBI. The specimen was passed from the bowels of a woman who had suffered for about one year from chronic diarrhœa. She had frequent attacks of colic, associated with a painful swelling in the region of the gall-bladder and a yellow discoloration of the skin. Perihepatitis was suspected, and the patient was directed to abstain for a time from all nourishment except milk and stimulants. Finally the patient died, after having suffered numerous attacks of chills with high temperature, probably due to hepatic abscess. An autopsy was not made. The specimen presented was as large as a champagne cork, very light and brittle; it was found to be insoluble in alcohol and ether, slightly soluble in alkaline liquids, and readily soluble in acids; it consisted of casein, salts, very little fat, and no cholesterin, and was in all probability a formation from the milk taken in large quantities by the patient.

A DETACHED FINGER AND TENDON.—Dr. BALSER showed a finger, with the tendons of the flexor profundus and sublimis attached, which was severed from the hand of a man who endeavored to scale an iron gate and got caught on a projecting point. The tendons were about 9" long. The wound was not painful, and healed promptly. Billroth had reported such a case.

Dr. KUDLICH referred to a similar injury, treated some years ago at the Chambers Street Hospital.

FALSE NEUROMATA.—Dr. A. G. GERSTER showed two such tumors of small size. The one was removed from the lateral aspect of the fossa poplitea, the other from the anterior aspect of the thigh, a little above the patella—their microscopic structure being that of a fibroma. He also presented a papilloma of the rectum, taken from a woman on whom he had operated for hæmorrhoidal tumors. The day after the operation the rectum was cleansed with an injection of lukewarm water, whereupon the growth made its exit and was removed by ligature and knife. It was found to consist of connective tissue and cylindrical epithelium.

Dr. JACOBI remarked that adenomata of the rectum were often met with in children, and frequently overlooked, as they produced little pain or hæmorrhage.

URTICARIA FOLLOWING VACCINATION.—Dr. MEAYLAG reported the case of a child whom he had vaccinated, and who subsequently became afflicted with urticaria, the eruption making its appearance on the tenth day and persisting for four days.

Another case was that of an elderly woman, with intermittent urticaria and high fever, accompanied by profuse perspiration. The patient had three such attacks, the second on the third day, the last one on the sixth day, the disease being

probably checked by a large dose of quinine, which was given after the third attack. A similar seizure, some months later, was promptly relieved by a single dose of quinine.

Dr. KLOTZ, referring to a recent publication by Behrend, of Berlin, on cutaneous eruptions following vaccination, thought that they, as well as such forms of exanthemata as followed the administration of certain drugs, might be explained by assuming an idiosyncrasy.

A. CAILLÉ, M. D.,

Secretary pro tem.

A STATED meeting was held May 26, 1882, Dr. BALSER in the chair.

Dr. H. S. OPPENHEIMER introduced an old man who had suffered DISLOCATION OF THE LENS of the left eye fifteen years previously, and was now afflicted with acute glaucoma. The lens had found its way into the pupil, and was there held fast. The eye was painful and injected, intraocular pressure was increased, iris was present, and perception of light was almost nil.

The patient declining all operative interference, Dr. Oppenheimer simply applied atropine, whereupon the lens became free and floated into the vitreous. Some weeks later a similar attack was treated in the same manner. During the present and last attack atropine was instilled as before, and the patient directed to lie face downward, in which position the lens gravitated into the anterior chamber and was there retained by contracting the pupil with eserine, and extracted in the usual manner. After the wound had healed, the eye was found clear and free from pain; the patient was able to see $\frac{2}{15}$. The ophthalmoscope revealed retinitis pigmentosa.

Dr. GRUENING remarked that in this case atropine was indicated. By dilating the pupil, the lens would become free and cease to be a source of irritation.

LARYNGEAL SYPHILIS.—Dr. R. TATSKY showed the larynx of a negro who cut his throat during an attack of severe dyspnea in consequence of syphilitic necrosis of the interior of the larynx.

The autopsy showed perichondritis of the margin of the epiglottis, with ulceration of the cricoid and thyroid cartilages, and hyperæmia of the true and false vocal cords.

Dr. JACOBI thought it was a case of acute chondritis, in which tracheotomy was indicated.

FOREIGN BODIES IN THE INTESTINES.—Dr. S. KOHN reported the case of a melancholy female with symptoms of intestinal obstruction and general peritonitis. She improved under treatment, and subsequently suffered five similar attacks during the course of five weeks. After her last illness, she passed from her bowels three teaspoons which she had swallowed.

A similar case was reported some years ago by Mr. Poland, of London.

ELEPHANTIASIS VULVÆ.—Dr. P. F. MUNDÉ exhibited this specimen, involving both labia and clitoris of a mulatto woman twenty-four years old. The patient first noticed a swelling after her second confinement, and after the birth of her third child the parts became ulcerated and painful to such a degree as to produce in the patient a tendency to nymphomania.

The removal of hypertrophic labia might be accomplished by the thermo-cantery, the galvano-caustic loop, or the knife. Schröder reported a case in which he removed the mass from below and applied sutures immediately as he went along, without obtaining primary union, however.

In operating, Dr. Mundé transfixed the hypertrophic tissues with three large needles, underneath which he applied a firm elastic ligature. After removing the mass with a knife, he secured twelve vessels and applied twelve sutures. The woman was four months pregnant at the time of operation.

Elephantiasis vulvæ was not at all rare, but the patients did

not readily submit to an operation, as the swelling did not, as a rule, interfere with parturition. Irritation from a chancreoid sore had been accused of producing hypertrophy of the tissues.

Dr. SCHARLAU said that he had a similar case under observation some years ago. The tumor was very large, but offered no impediment to the passage of a child.

SPINAL MENINGITIS.—Dr. JACOBI reported such a case in the person of an elderly lady who had suffered much anxiety and mental strain from domestic trouble. Some three weeks ago she received a message by telegraph which affected her very much, and, while walking on the street, became unconscious and fell to the ground. She was carried home, and remained in a state of great excitement for four days. She tore her hair, and became so violent as to require large doses of chloral hydrate and potassium bromide. She got better, but had no remembrance of the four days of severe sickness.

An examination at the present time showed the following conditions: Pupils of equal size; tongue and uvula not deflected; sensibility perfect throughout the body; inability of the left arm normal; severe tremor of all other extremities. The patient complained of numbness in the feet, and pressure on the spinous processes was painful. The temperature was 101° F.

Dr. JACOBI believed it to be a case of general spinal meningitis, induced, probably, by great mental excitement.

Dr. SEESSEL made inquiry as to the presence of ankle clonus in this case.

Dr. JACOBI replied that it was impossible for him to isolate this symptom, almost all the muscles of the body being in continual motion.

Dr. SEESSEL remarked that the presence of ankle clonus, in connection with the symptoms stated above, would strongly indicate paralysis of the lateral cords.

PERIODIC ALBUMINURIA.—Dr. SCHARLAU gave the history of a woman, thirty-three years old, who, four years ago, was taken sick with diphtheria and rheumatic arthritis accompanied by albuminuria, and recovered, with slight insufficiency of the mitral valve and hypertrophy of the left ventricle.

This lady had given birth to three healthy children in the first years of her marriage, and subsequently became pregnant ten times, the fœtus never again attaining maturity. About the second month of each pregnancy albumin appeared in the urine, remaining until some weeks after the premature birth of the dead and macerated child, which usually took place in seven or eight months. Of late, however, this patient's water always contained albumin, but no renal elements.

The woman was not syphilitic. The placenta and fœtus were repeatedly examined, and nothing noteworthy was detected. Dr. Scharlau, notwithstanding the most thorough examination, had not been able to determine the cause for the periodic albuminuria and interrupted pregnancy.

REFLEX NEUROSIS.—Dr. MUNDÉ reported two such cases. He examined a lady who had suffered for many years from severe headache, which had not yielded to the treatment of several of our best physicians. He found a bilateral fissure of the cervix uteri, together with an indurated and painful spot in the anterior wall of the vagina. He applied one pole of the constant battery to this place, and, after a few sittings, the tissues became soft and the patient's headache was gone. The second case was that of a woman of forty, whose headache was cured by the application of a suitable pessary to relieve a retroflected womb.

Dr. GARRIGUES stated that he had had a similar experience in his practice.

Dr. GRUENING remarked that he had met with quite a number of neuroses in and about the eye *ex causa uterina*.

A. CAILLÉ, M. D.,

Secretary pro tem.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

(Concluded from page 50.)

Dr. W. H. H. GITHENS stated that on June 18, 1878, Dr. Albert H. Smith had operated upon Mrs. M. for the restoration of a lacerated cervix; and on July 10th of the same year had performed perinæorrhaphy, both operations proving successful. On June 19, 1879, a year and a day after the first operation, he (Dr. Githens) delivered her of a boy at full term, the labor being uncomplicated and easy, and no tear of either cervix or perinæum occurring.

Dr. E. E. MONTGOMERY remarked that, as regarded the question of sterility resulting as a consequence of the restoration of a lacerated cervix, he had been operating since 1879, and five of the patients he had operated upon had since become pregnant. The first patient upon whom he operated became pregnant lately, but aborted; as she had desired not to become pregnant, and was anxious that an abortion should occur, he believed that it had been artificially induced. Another patient, operated upon in 1880, had been delivered in January, 1883, without accident. A patient operated upon in 1879 was now four months advanced in pregnancy; before the operation she had aborted at three months; this accident was apparently consequent on the existence of the laceration. Of these five cases, two were lacerations of long standing, and three were recent.

The PRESIDENT had operated in one case of nine years' standing. During the first two years of that time the patient had two miscarriages, and then remained sterile for seven years. The operation was performed eleven months ago, and she was now two months advanced in pregnancy.

Dr. ALBERT H. SMITH had heard Dr. Baer's paper with pleasure. The general impression in this city was that sterility was a consequence of the injury, and a large proportion of the patients operated on by him had soon become pregnant after the operation. The fear of the recurrence of the accident prevented pregnancy in many cases, as means were used to avoid that condition. Improved general health and local comfort were a result in a majority of the cases, even where pregnancy did not occur.

He would like to hear Dr. Baer's experience about the existence of obstinate nausea in pregnancies after operation in long-standing cases, accompanied with an enlarged and hardened condition of the cervix. It had been so with him. As regarded the results of labor, there had been no tendency to relaceration in the same position. He used inhalations of chloroform and hot-water douches in such cases, and did not rupture the membranes early; he also prevented the patient from bearing down, and by these means secured a slow and safe labor. He was sorry to hear that Dr. Baer had no confidence in the power of the operation to reduce the size of a hyperplastic uterus. He had seen cases of so-called subinvolution of the uterus in which, after the complete failure of local means—such as iodine, silver nitrate, etc.—the organ was reduced to one third of its bulk by operating upon a laceration of the cervix. The rapidity with which the ultimate result of reduction in size was reached was in proportion to the time that had elapsed since the injury.

When the cervix was much hypertrophied, and ectropion existed—such a cervix as would formerly have been called cancerous, and would have been amputated—the stitches should be left in a long time. If they were removed too soon, there was a proneness to gaping, a sort of ectropion or sprouting. This would not happen if the sutures were allowed to remain thirty to forty days.

Dr. WILLIAM GOODELL regretted that he had been too late to hear Dr. Baer's paper. With reference to the question of the influence of the operation in causing sterility, he thought it

did have such an influence. He had operated in one hundred and sixty-nine cases, and had only known of seven patients who had since become pregnant. There had probably been more, as the patients had passed away from his knowledge, and he had never heard of them again, for he did not practice obstetrics outside of the Preston Retreat. In two of the seven cases a second operation was required, but it was slight. In one case not the slightest change occurred in the form of the os. As regarded the effect of the operation in preventing cancer, he believed it fully, both from experience and from *a priori* reasoning. He had seen but two cases of epithelial cancer in women who had not borne children. In fact, his experience had been that the greater the number of children, the greater the liability to carcinomatous degeneration, and often the notch of a previous laceration was seen in the cancer. If carcinoma was, as we believed, a local disease at its beginning, what more probable cause could we have than such an irritating sore as a bad laceration of the cervix. In more than one case his principal reason for operating for the restoration of the cervix had been a history of cancer in the family.

Concerning the effect of the operation upon hyperplasia, he believed with both Dr. Smith and Dr. Baer. There was an element of passive congestion, the result of the irritation of the laceration, and, when the cause was removed by the operation, the effect passed away, and a great reduction in the size and weight of the uterus was secured. He believed that preliminary treatment in cases of enlargement with ectropion had a very great effect upon the results of the operation. Applications of iodine, glycerin, and tannin, the use of the very hot douche, and cross-hatching of the enlarged Nabothian glands, had a softening and calming effect. In such cases, if the hard, gristly triangle in the apex of the wound were carefully excised, the tension on the stitches was slight. He generally removed the sutures in about nine days after the operation; in one case, in consequence of circumstances affecting convenience, they were allowed to remain three weeks. When he could secure easy approximation and close coaptation, which was readily done by means of his guiding thread, perfect union was more probable than in any other plastic operation. For his sutures he used the finest possible silver wire; it was drawn to order.

As regarded the results of the operation on various symptoms that were supposed to arise from the presence of the injury, he had experienced the greatest success and great disappointments. In some, local treatment would have answered every purpose. The most expensive present he had ever received from a patient was from one on whom he had performed this operation and relieved, by it, a morbid mental condition that had lasted for years, with great local distress, and inability to walk any distance or to stoop over, as in packing a trunk.

Dr. SMITH knew well the value of preliminary treatment, and employed it faithfully, but there was a limit to the endurance of a patient; she could not be kept too long upon her back, and it sometimes became necessary to operate before all that was possible had been accomplished. In some cases there was an unavoidable tension, and in others a friable condition of the tissue which was benefited by leaving the stitches in position. He allowed the patient to attend to her domestic duties with the sutures *in situ*. In his experience there had been no relation between the number of children and the tendency to carcinomatous degeneration. Such growths had been in women who had had but one or two children only. Cancer of the mammary gland was most common in sterile women, or when children had been few. He had rarely seen cancer in its early stages in an enlarged cervix with ectropion, but, on the contrary, in unnaturally small cervixes.

Dr. WHARTON SINKLER had three patients who had been

operated upon for lacerated cervix, one of them by Dr. Goodell. All of them had since become pregnant.

Dr. MONTGOMERY remarked that one sixth of the patients he had operated upon (within four years) had since become pregnant. He thought Dr. Smith's suggestion an over-true one. As the injury was the result of pregnancy, the risk must not be run again. In the Philadelphia Hospital he had found cancer of the uterus most common after numerous labors. The same rule had held good in mammary cancer; it had been most common after frequent nursing. Uterine hyperplasia was reduced by operating on the torn cervix. He had operated with this result in view in cases of so-called subinvolution. Dr. — divided the cervix and removed a wedge-shaped piece, reuniting the wound, as a remedy for this condition.

Dr. H. BEATES had performed twenty-three operations, and had had two pregnancies occur afterward. He had had under his care seven cases of uterine carcinoma, and in all of them cervical laceration coexisted. The number of children varied from one to several.

Dr. BAER, in closing the discussion, remarked that, in answer to a letter of inquiry to the husband of a patient upon whom he had operated to restore the cervix, he received one in which the idea of another pregnancy was scouted with disdain. He had not observed that more nausea was present in pregnancies following the operation, but he had not had a case of long standing in which pregnancy had occurred as yet. He thought Dr. Smith agreed with him fully regarding reduction in size of an old hyperplastic uterus, whose muscular element had been replaced by connective tissue, when he said that "the rapidity with which the ultimate result of reduction in size was reached is in proportion to the time that had elapsed since the injury." That was exactly the position he (Dr. Baer) had taken in his paper, but he believed the change in the parenchyma of a connective-tissue uterus to be exceedingly slow, if any. The reduction in size occurred in the mucous membrane and the tissues immediately under it, and in the cellular tissue around the organ. Sutures were removed in from eight to twelve days; he thought they ought to be removed as soon as union was solid, because he believed that they had an irritant action after that time. If that action was desired, then they might remain, but that was returning to the old idea of the seton, and, to a certain extent, the operation then ceased to be a plastic one.

W. H. H. GITHENS, M. D., *Secretary*.

NEW YORK MEDICAL AND SURGICAL SOCIETY.

A STATED meeting was held February 10, 1883, Dr. T. GAILLARD THOMAS, President, in the chair.

RENAL CALCULUS.—Dr. H. F. WALKER related a case as follows: The patient was a man, about forty-eight years of age, who had suffered periodically for at least ten years with attacks of pain in the left side in the region of the kidney, extending down toward the bladder, and with other symptoms of renal calculus. No calculus, however, had been passed in the urine. The attacks were preceded for two or three days by premonitory symptoms. Various kinds of treatment had been resorted to without much benefit. The last remedy administered was the fluid extract of hydrangea, in doses of a teaspoonful three times daily. After this had been taken for about two or three months the patient suffered from a specially severe attack of renal colic, which lasted for three days, being longer than ordinary, and the pain extended farther down the line of the ureter than usual. There was also nausea and vomiting. The attack was followed by the passage of a calculus about one third the size of a Java coffee-bean, and the patient had since expe-

rienced complete relief. In reply to a question by Dr. Post, Dr. Walker said that hydrangea was moderately diuretic. He was led to use it in this case by an article in the "Medical Record," in which the writer stated that it was almost a specific for renal calculi.

The PRESIDENT remarked that he had at present two cases of supposed renal calculus under observation in which he intended to administer hydrangea as a possible means of diagnosis. The first patient, the wife of a physician, had been seen by a specialist in genito-urinary diseases, who had sent her to him on account of a tumor which was perceptible on palpation over the abdominal walls. She had been taken very suddenly with violent pain in the back, which extended down the course of the ureter and the crural nerve. Soon afterward the urine became bloody, and contained a large amount of pus and epithelium from the pelvis of the kidney and the ureter. There were no tube casts. At the time of the occurrence of this sudden attack of pain the patient, or her husband, upon passing the hand over the abdomen, discovered a tumor. The tumor was quite distinct when Dr. Thomas saw the patient, but it was only perceptible in the sitting posture, a fact which he had observed in certain cases of displaced kidney. The presence of blood in the urine in considerable quantity suggested cancer of the kidney, but, as the disease had lasted for two years, and the patient was healthy looking and growing stouter as the disease advanced, he thought malignant disease could be excluded. The affection in the second case had also lasted a long time, and gave a similar history.

Dr. A. C. POST remarked that a stone which had remained in the pelvis of the kidney for some time was usually too large to pass through the ureter.

The PRESIDENT remarked that it was astonishing how large a calculus might remain in the pelvis of the kidney for an indefinite period without giving rise to symptoms. Recently a physician, who died apparently with no other symptoms than gradual wasting away, was found at the autopsy to have a calculus in the pelvis of the kidney as long as the thumb, twice as large, and of the shape of an elephant.

Dr. ABRAHAM DUBOIS remarked that a man once brought to his office a handful of stones, some as large as the end of his finger, and stated that he had often passed them in his urine, and had not suffered in the least.

Dr. A. B. BALL reported further on the case of blood extravasation in the calf of the leg, narrated at a recent meeting of the society. He and Dr. Sands, who saw the case in consultation, had told the patient that the tumor would probably disappear within two weeks, and she would entirely recover. It had now been six weeks, and the patient had just got out of bed for the first time. The blood clot was probably more deeply situated than had been supposed, and, after having become hardened, was slowly undergoing absorption.

TORTICOLLIS.—Dr. POST stated that several years ago he reported a case of torticollis in which he divided the sterno-cleido-mastoid muscle by an open incision, division of the main bands of the muscle being followed by scarcely any relief whatever; the knife was then introduced more deeply, and the last layer of the muscle cut, with the effect of complete and permanent relief. He recently had a similar case in a girl who had suffered from torticollis in a marked degree from early infancy.

SPINA BIFIDA, TALIPES CALCANES.—Dr. POST mentioned the case of a child, six weeks old, one of twins, that was brought to his clinic lately with a tumor of the spine about the size of a pigeon's egg, developed from the posterior wall of the spinal canal, fluctuating distinctly, which was recognized as spina bifida. The child was also found to have club feet, of the somewhat rare form in which sufficient contraction took place in the

comparatively weak peroneal muscles to flex the foot upon the leg. He directed treatment by manual extension of the foot, which method he had found efficient in a number of cases. If this proved ineffectual, other methods of treatment would be resorted to when the weather was less inclement.

MODIFIED DIPHTHERIA.—Dr. S. O. VAN DER POEL lately attended a young man who, having been exposed to membranous croup, was suddenly attacked violently at night with sore throat. The temperature rose to 104.5 Fahr., the fauces became reddened, and a large white patch was found upon the tonsils. The patch did not extend back of the tonsils, and was thinner and less highly colored than that usually seen in diphtheria. Fever continued about two days, the exudative patch began to loosen at its edges, and entirely disappeared within four days. There was no swelling of the external glands. The case in many respects resembled croup more than diphtheria, and he asked if any of the members had met with such cases, and whether they regarded them as cases of true diphtheria.

Dr. BALL said he had seen a number of such cases—cases in which the throat affection was attended by a rapid and high elevation of the temperature. The exudation usually cleared off within from forty-eight to seventy-two hours. He did not regard them as cases of genuine diphtheria. They probably belonged to the class which the Germans designated as catarrhal diphtheria. So far as he was aware, they never terminated fatally.

Dr. WALKER had observed that the color of the throat in these cases was less of a purple hue than belonged to genuine diphtheria; the fever usually commenced sharply, there was a slight chill, and often a headache which was so severe that the patient complained but little of the throat.

The PRESIDENT then read a paper on **INTRA-UTERINE INJECTIONS IN THE TREATMENT OF PUERPERAL SEPTICÆMIA.***

COMPLETE DESTRUCTION OF THE KIDNEY BY CANCEROUS DISEASE; REMOVAL.—The other case to which the PRESIDENT would call attention was that of a patient residing in Connecticut, who gave the following history: She was a married woman, fifty years of age, the mother of six or seven children. She stated that she had attended her twenty-five years ago with Dr. Metcalfe, and that seven years ago she called at his office on account of a tumor situated on one side of the pelvis, and that he examined it and told her it was a fibrous tumor of the uterus. She had watched the tumor during these seven years, and it gave her no trouble until three months ago. It then began to increase in size, and continued to grow until it filled one half of the abdominal cavity. The patient emaciated and lost strength, and had not been able to leave her bed during the last three months. A great deal of doubt had been entertained by the physicians who had seen her with regard to the character of the tumor. An aspirator-needle had been passed, but no fluid was withdrawn. Dr. Thomas found, upon examination, that the tumor was of large size, and he was unable to determine whether it was ovarian or whether it was uterine. If it were uterine, it was probably the original fibroid tumor which, according to the patient's statement, he had diagnosed some years previously, and which had since taken on the character of a sarcoma. As the patient would certainly die within a short time if an operation were not performed, he proceeded to remove the tumor eleven days ago. The moment the abdominal cavity was opened he recognized the fact that the tumor could not be ovarian, for the intestines lay in front of it. The uterus was also found to be entirely disconnected with the tumor. The tumor was evidently deeply situated behind the

intestines, and fastened by adhesions, but he was unable, after repeated trials, turning the patient from side to side, to remove the intestines from its surface. The gentlemen present were consulted with regard to the propriety of closing the abdominal wound and abandoning the operation, but the general feeling was that if this were done the patient was doomed to certain death, and, although it was also highly probable that death would take place after removal of the tumor, it was thought better to give the patient the chances of the operation. He then cut through the mesocolon with the scissors, passed the hand down upon the tumor, gradually swept it upward, came upon the pedicle, which he ligated, and removed the tumor as quickly as possible, the condition of the patient now being very unfavorable. At that time he felt satisfied that the tumor was the kidney. The condition of the patient did not allow of time to search for the other kidney. The cavity was cleaned out, the opening closed, a large drainage-tube inserted, and the patient put to bed. The specimen had been examined microscopically by Dr. Welch, who reported that the mass was composed of cancerous material, but he was unable to determine to what organ it belonged. He could only make out the renal capsule, which was also involved in the disease. Dr. Thomas felt certain, however, that the mass, which weighed six pounds, involved the kidney. The stitches were removed on the ninth day. The patient did very well for forty-eight hours. She then became noisily delirious, and at the end of fifty-six hours she was quite delirious, behaving very much like a person suffering from a low grade of puerperal mania. The pulse was between 130 and 135 before the operation; it had now fallen below 120. The urine had been secreted in amount from 24 to 26 ounces every day. There had been no tendency to suppuration, and no peritonitis, but there had evidently been some septicæmic action, the temperature having kept up to 102 and 103, and to-day was 101.6. It had at no time gone above 103. The patient would probably recover from the operation.

Discussion on Dr. Thomas's paper being in order, Dr. J. W. McLANE said that his experience with washing out the uterus had been that, in those cases in which the absorption of the septic material had evidently taken place from within the uterus, the temperature could be reduced by injections into the cavity. But in some cases, undoubtedly septicæmia in character, the rapidity of the absorption was very great; a general peritonitis was set up, which would seem, at the post-mortem examination, to have been the only affection from which the patient had suffered. The question arose in his mind whether washing out the uterus under such circumstances would save the life of the patient.

The PRESIDENT thought that such cases would probably terminate fatally, whether the uterus were washed out or not; that it was then too late for treatment. His experience had been that the sooner the injections were begun in a case of puerperal fever the more successful would be the result.

Dr. G. G. WHELOCK remarked that he had seen metro-peritonitis treated by washing out the uterine cavity with the result of not reducing the temperature in the least. The diagnosis had been confirmed by a post-mortem examination.

Dr. WALKER remarked that he had made use of uterine injections a great deal, both in private and in hospital practice, and had produced much benefit with them, especially in cases of threatening septicæmia.

The PRESIDENT remarked that Dr. Jones published a case several years ago, in which the injections were begun after the temperature had reached 107° and 108°, and the patient recovered.

Dr. WALKER remarked that he had published a case in which the temperature rose to 108°, and injections were continued for

* Dr. Thomas's paper will be found in this journal for March 31st, page 347.

six weeks before the patient finally recovered. He did not think we should always expect to find an external lesion which would account for the absorption of septic material; he believed that it took place more frequently from the inner surface.

The PRESIDENT referred to a case to which Dr. J. B. Hunter was called in consultation in a neighboring city about eleven days ago. The patient had been delivered five weeks previously, and was suffering from septicæmia with a temperature of 103.5°, the pulse 120. Her family physician, who was a competent man, and several others, had given up all hopes of saving the patient's life. When Dr. Hunter saw her he proposed to wash out the uterus, but was met with the most stubborn opposition. Obtaining the husband's consent, however, he proceeded to make the injections, and in less than twelve hours the temperature and the pulse fell, and the patient was greatly relieved. The treatment was still being continued. In reply to a question by Dr. McBurney, the President said the strength of the solution which he used at the present time was 2½ per cent.

Dr. WHELOCK remarked that at the Nursery and Child's Hospital, when the temperature rose to 103°, and there was a discharge of foul odor, uterine injections were used, and always with the most favorable results.

Dr. J. G. CURTIS asked whether the cause of the entrance of air into the circulation in the cases which had been reported could in every case be traced directly to the introduction of the catheter into a uterine sinus.

Letters to the Editor.

ETHICS AT SANDY HOOK, CONN.

107 WEST FORTIETH STREET, NEW YORK CITY, July 5, 1883.

To the Editor of the New York Medical Journal :

SIR: In your issue of June 30, 1883, is a note from "Old-Code Man," with copy or slip from the "Newtown Bee" of June 22d.

As I am the doctor to whom this slip and your correspondent allude, I crave the opportunity to say that this notice—for such it has the appearance of being—was entirely unknown to and unsought by me, and I read it for the first time in your journal, although I returned from Sandy Hook late upon the evening of the 1st inst., where I had been spending a few days with my friend Dr. Smith, to get a breath of country air and to perform an operation upon one of his patients.

I was not aware that my advent had been thus heralded, and heartily regret its unprofessional appearance.

I am a strong believer in the fact that "good wine needs no bush," and have always been careful that no bush should ornament my door, and, from a long acquaintance with Dr. Smith, I am sure his views are equally as strong on this point as are mine, and I am confident that this matter crept into the columns of the "Bee" more as a subject of local news than by reason of any desire to herald my coming.

The ridiculousness of your correspondent's connecting this matter with the "New Code" is very apparent, and partakes largely of the nature of Sergeant Buzfuz's "Chops and Tomato Sauce."

I have the honor to be, sir, yours respectfully,
J. OSCROFT TANSLEY, M. D.

SANDY HOOK, CONN., July 9, 1883.

To the Editor of the New York Medical Journal :

SIR: I notice in your journal issued June 30th a comment, signed "Old-Code Man," upon an item printed in the "Newtown Bee." I would not notice the article did it not implicate my friend Dr. Tansley, but for his sake I trust you will allow me space to show his true position in the matter. During last year I invited Dr. Tansley to visit me, and while here I asked him to operate on a few of my patients who required special treatment, but who could not afford or who had not

the disposition to visit the city to consult a specialist or confine themselves in a hospital for a stated time. His results were so satisfactory that, after his departure, I was asked as a favor to inform several parties when he would repeat his visit. I sent for him a few weeks ago to operate for me, and obtained his consent to come. Meeting the editor of the "Newtown Bee" shortly after, I told him of Dr. Tansley's intended visit, and asked him to note the fact in his paper, as I had been requested to notify a number of persons who desired to see him. Two of them lived out of town and were subscribers to the "Bee." The result was the item in question. It was printed before Dr. Tansley's arrival in town, and he knew nothing whatever of the existence of even the "Newtown Bee" itself, and I did not afterward inform him. If this statement did not entirely vindicate Dr. Tansley, I would show, by a letter from the editor of the "Bee" and from the few who profited from the squib, that this was simply a matter of convenience to a few of us, but it is unnecessary, as I am perfectly willing to bear all the blame and take the consequences. I certainly had no idea of advertising Dr. Tansley in any way, and it never occurred to me that a little local matter of interest to my patients and myself alone should be looked upon as a transgression of rules of medical etiquette. What possible relation this affair bears to the new code is entirely beyond my comprehension, and the ignorance and confusion of ideas in regard to this question are strongly manifest in your correspondent.

I am very sincerely yours,
ANSON P. SMITH, M. D.

NEWTOWN, CONN., July 9, 1883.

To the Editor of the New York Medical Journal :

SIR: In reference to the item regarding Dr. Tansley, of New York, which recently appeared in the "Newtown Bee," and on which your correspondent commented, I would say that Dr. Tansley knew nothing whatever of its insertion, and it was printed after a conversation between Dr. Smith and myself, in which Dr. Tansley's intended visit was referred to. There was no idea of making an advertisement of it, as it was not paid for; it was given as a matter of news to several interested in the doctor's visit.

Respectfully,
R. H. SMITH,
Publisher "Bee."

ETHICS IN VERMONT.

NEW YORK, June 30, 1883.

To the Editor of the New York Medical Journal :

SIR: The pinnacle upon which some of the State medical societies perch in the matter of the "Code Question," and from their elevation view with lofty disdain certain other societies, does not, in some instances, seem to be composed of the solid material which such structures ought to contain. Acts which they so loudly deery in others they permit in their very midst, and even wink at more gross violations of the code, thus straining at the gnat and swallowing the camel—hump and all. If my recollection serves me, the Vermont State Medical Society refused recognition to the delegates of the New York State Society, and in its action proclaimed itself an adherent to the Old Code, which (though no more stringently than the "New") forbids advertising of specialties or remedies.

In glancing over a paper published in that State, I was somewhat surprised to find over the name of one of the members of the Vermont State Medical Society an advertisement of a "Remedy" which gave not only "Relief," but offered "a possible cure" for a certain disease. And, not content with affixing the title "M. D.," the advertiser made use of the "Dr.," making it read "Dr. — — —, M. D."

Perhaps the Vermont society takes advantage of that "mental reservation" which, in its assumed adherence to the national code, it may think itself entitled to make use of.

LIBERTY.

THE PREVENTION OF CONCEPTION.

AUSTIN, TEXAS, July 5, 1883.

To the Editor of the New York Medical Journal :

SIR: On page 715, vol. xxxvii, of the journal we are told what a terribly wicked thing it is to prevent conception, etc. Then, again, on

page 728, we are told that a certain unfortunate woman became pregnant again, "although warned of the danger," etc. Now, is there not a glaring inconsistency in these two statements? What could have been stated or implied to said "unfortunate woman"? What course, indeed, should she have pursued? We are not told how the said warning was worded. What do you usually tell women to do who you think should be "warned" against again becoming pregnant?

These and other germane questions should be answered, not merely to myself, whom you may consider hypercritical, but to the public at large. I frankly acknowledge that I am often at a loss as to what I should tell those unfortunate women who need *warning*, or who apply for advice for means to prevent too rapid childbearing. And that there are *many* women who bear children more frequently than is for the good of any and all the parties concerned, even the State itself, there can be no successful denial. This being the case, what are doctors of medicine to do? Should they continue to grope and grovel with the ignorance-fostering priestcraft, as in the superstition-controlled past, or should they lay aside these things, and exert themselves to devise some practical solution of this *warning* problem? It will not now avail us to endeavor to smother or evade this momentous question, for it is one that is daily growing more clamorous for an intelligent hearing. From time immemorial we have been "warned" that the dreadfully destructive practices of preventing conception, of abortion, and of fœticide would depopulate the earth. But, does not the history of the past, covering any or all of its epochs, up to date, prove beyond doubt the utter and entire fallacy of such warnings? Do you see any danger of there not being enough children born in this or any other country? All history of the past goes to prove that laws that were intended to effect, directly, the increase of births have been of no appreciable influence in promoting an increase of the number of children born in any given country. The increase in the number of children born is not directly subject to the influence of legislative enactments.

This subject is too vast and momentous to be treated of in a letter but it certainly behooves those who have the talent and opportunity to enlighten the public, to give them something better than the baseless homilies and anathemas that have from time immemorial been set before the public.

With respect and best wishes,

I remain yours fraternally,

Q. C. SMITH.

Miscellany.

THE ANNUAL MEETING OF THE STATE BOARD OF HEALTH OF WEST VIRGINIA.—We are indebted to a member of the board for the following account of the annual meeting:

The State Board of Health convened at Martinsburg, Wednesday, the 11th inst., in annual session. There were present at this meeting the following members of the board: Dr. George B. Moffett, President, of Parkersburg; Dr. Lawrence Carr, of Charleston; Dr. George H. Carpenter, of Moorefield; Dr. C. T. Richardson, of Charleston; Dr. James E. Reeves, the Secretary, of Wheeling; and Dr. William M. Late, of Bridgeport.

The secretary read the minutes of the previous meeting, which were approved, and then followed his report of the business of his office during the preceding six months. Copies of correspondence with R. A. Harrison, Esq., of Columbus, O., were read, and the action of the secretary in relation thereto was fully indorsed. The visitation of small-pox in the counties of Mercer, McDowell, and Wyoming was next referred to, and the action of the local health boards in those counties in successfully *stamping out* the disease was shown to have been one of the good results to the whole people of West Virginia of the passage of the State Board of Health law. It seemed evident that, but for the specific powers granted under the law, and its energetic administration both by the officers of the State and county boards of health, the whole southern portion of the State would have been swept by small-pox from the starting point in Mercer, at a cost both of life and prop-

erty which would have been impossible to estimate correctly. From the office of the secretary of the State Board the fullest instructions were sent to the local health officers in the scourged district for the successful fight against the small-pox, all of which received the commendation of the State Board. Another matter of great importance was in reference to the establishment of local or county boards of health. Under the law of 1881 the manner of their creation was, first, the nomination of three persons for each county by the State Board of Health. These nominations so made were either approved or rejected by the county courts. Now, under the amended act of 1882, the manner of establishing county boards was exactly reversed: the county courts nominated and the State Board confirmed or rejected, as its wisdom directed. The term of office (two years) of the present county boards would expire with this month, and it would be in order for county courts to make their nominations for such officers to the State Board. That due notice might be given, Dr. Reeves, the secretary, was instructed to bring the matter, by circular letter, to the attention of the counties, and at the same time urge upon physicians full compliance with the law in relation to the duty with which they were charged of promptly reporting to presiding officers of county boards all cases of acute contagious and infectious diseases under treatment.

Four applicants for medical certificates presented themselves for examination, of which number Dr. Hoffman, of Keyser, was the only gentleman whose examination warranted the granting of authority to engage in the practice of medicine and surgery in West Virginia.

The question of the good standing of several medical colleges was next considered, and to the list of medical schools whose diplomas the board had already refused to recognize was added the American Medical College, of St. Louis, Mo.

Our correspondent adds:

"In the board's proceedings you will find that we have pronounced against another diploma mill—'The American Medical College' (*celectic*), of St. Louis, Mo. Another item worthy of attention, perhaps, is the fact that but *one* of the *four* who were examined for a medical certificate passed successfully.

"Will not the example furnished by West Virginia encourage legislation in those States that have not yet taken the advanced step? Just think of it, that such a villain as Hale boasts of his registration in New York, and that his headquarters are at 162 Broadway!"

The man Hale, referred to, is the one whose experience in West Virginia we alluded to in our issue of June 30th, p. 716.

PAGET'S DISEASE OF THE NIPPLE.—Dr. Louis A. Dühring reports, in the July number of the "American Journal of the Medical Sciences," two cases of Paget's disease of the nipple, which he holds is not an eczema, but a peculiar disease with a malignant tendency. It must be distinguished from eczema, which it resembles, and from ordinary cancer, which it is altogether unlike in its earlier stages. It seems to occupy a ground having the characters of both diseases. The report is interesting as showing the natural history of the affection. This is peculiar. The course of the process is emphatically chronic. In both instances, moreover, the progress of the disease was insidious as well as slow. Nothing of a malignant nature was suspected until after the lapse of five and ten years, respectively. The itching, which eventually became such a marked symptom, was in both cases insignificant until the affection had existed several years. It may be said not to have manifested itself until after the process had been well established. In this respect the disease differs decidedly from eczema, where itching is one of the first signs noted. The circumscribed, sharply defined outline of the lesion, and the slightly elevated border, are also symptoms which do not obtain in eczema. The brilliant color of the lesion is striking, and is more marked than in eczema. The absence of the "eczematous surface," characterized by appreciable discharge or by vesicles, pustules, or puncta, coming and going from time to time, and the absence of exacerbations, so usual in eczema, may also be referred to. A point to which attention may also be directed is the infiltration, which is firm or even hard, but is not deep-seated. It is rather superficial. In eczema, on the other hand, it is soft. The pains coming on later in the course of the disease, and the indurated, lumpy, or knotted lesions within the gland structure of course point strongly to the ma-

lignant or cancerous nature of the disease, the existence of which can not be doubted.

THE TEXAS SANITARY CORDON OF LAST SUMMER.—In an exceedingly instructive article on The Sanitary Control of Epidemic Diseases, contributed by the Surgeon-General of the Marine-Hospital Service, Dr. John B. Hamilton, to "Appletons' Annual Cyclopædia" for 1882, we find the following graphic account of the cordon established in Texas last summer:

"A serious epidemic of yellow fever broke out in Bagdad, Tampico, and Matamoras, Mexico, and soon spread to Brownsville, in the State of Texas. There were in a short time, out of a city of some 5,000 inhabitants, between five and six hundred persons sick of yellow fever. A general panic prevailed throughout southwestern Texas, and refugees were leaving that part of the State in great numbers, as it was believed the infection would rapidly and certainly extend to the surrounding country. In these circumstances, an appropriation of \$100,000 having been placed at the disposal of the Treasury Department by the President, to prevent the spread of epidemics, the Governor of the State of Texas applied to the Secretary of the Treasury for assistance from the general Government; and, as the exact area of the infected region was undetermined, at my suggestion a cordon was immediately established from Corpus Christi, on the Gulf, to Laredo, on the Rio Grande, along the line of the Texas and Mexican Railway. No person was allowed to pass this cordon until after ten days' detention at some one of the quarantine stations (represented by flags upon the accompanying map), that length of time being considered necessary to determine whether or not the particular person would be attacked with yellow fever. Baggage was not allowed to cross the line upon any pretext. A hospital was established in the city of Brownsville, a dispensary opened, and experienced physicians and nurses sent there, who were constantly employed in the treatment of the poor, and all persons unable to pay were treated and cared for at the public expense. These physicians also aided the health authorities of the city in carrying out sanitary measures, including the fumigation of houses.

"As soon as practicable after the opening of the hospital, an inner protection cordon was established, thirty miles from Brownsville, the original cordon having been one hundred and eighty miles distant. Perfect liberty was allowed to the inhabitants of the infected city to leave at any time, and they were encouraged to scatter in camps; but they were not allowed to cross the cordon until after personal detention of ten days, and fumigation of their wearing-apparel; and, as in the case of the outer cordon, the crossing of baggage was positively interdicted. It was intended to remove the upper cordon between Laredo and Corpus Christi within ten days after the formation of the inner one, which extended from Santa Maria, on the Rio Grande, to the mouth of the Sol Colorado; but it was retained for several days longer, as certain of the refugees who had left Brownsville prior to the establishment of the Colorado cordon developed yellow fever. They were quarantined in the camps where they were, and their infected bedding and baggage burned. The fever continued its spread and devastation on the Mexican side of the Rio Grande, and Reynosa, Camargo, Mier, and Guerrero successively became infected. It was then found necessary to protect the entire line of the Rio Grande, from Laredo to Santa Maria,

a distance of nearly five hundred miles, by a cordon. The upper cordon, from Laredo to Corpus Christi, was then removed, and the line re-established along the Rio Grande, and the crossing-places carefully guarded; and, although the towns in Mexico were greatly devastated by the disease, there was no extension of it in Texas: on the contrary, it was confined to the limited district where it first appeared, bounded by the Colorado cordon on the one hand and the Gulf of Mexico upon the other. The Mexicans, seeing the good effects of the sanitary cordon in the United States, followed the example, and established quarantine stations in Mexico, guarding against the infected towns; and there, too, the quarantine proved successful, and arrested the spread of the disease. The Governor, the State Health Officer, and the State officers generally, assisted the work of the Government by all the means at their command. It was, however, opposed by the mayor of the city. In July, a few cases of yellow fever appeared in Pensacola, Fla., and later the disease became epidemic, and, as in Texas,



a general panic prevailed. The villages and towns surrounding Pensacola established a rigid quarantine against it, no person from that city being allowed to enter except after proper detention and fumigation. In consequence of this, the towns that had thus protected themselves by the quarantine were not infected, and the disease did not spread, while the places adjoining, that did not quarantine against Pensacola, had the fever. The Government also protected its navy-yard, which joins the city of Pensacola, by means of a sanitary cordon and non-intercourse with the city during the prevalence of the epidemic, and it, too, escaped. With these facts and this experience to guide us, it may be safely asserted that, with proper management, it is possible to prevent the spread of epidemic diseases from one locality to another."

HIPPURATE OF SODIUM.—This salt has recently come into request owing to the remarks concerning its properties made by Dr. Garrod in the Lancelot lectures this year. He has pointed out that when an excess of hippurate of sodium remains in contact with an alkaline one of uric acid for a certain time, the uric acid entirely disappears, and that the presence of excess of uric acid in the system was therefore probably

due to the absence of a sufficient quantity of hippuric acid to decompose it; since, in proportion as the diet partakes of a vegetable, and more particularly of a cereal character, the amount of hippuric acid in the urine is increased, and that of uric acid decreased. The quantity of hippurate of sodium necessary, in a dilute solution, to decompose uric acid appears to be in the proportion of twenty-five parts to one. Similar results were obtained by the use of benzoate of sodium, the benzoic acid uniting with glycin, or gelatin sugar in the body, to form hippuric acid. As the chalk stones of gout and gravel or calculi consist of urates of sodium, Dr. Garrod theoretically concluded that hippurate of sodium would be useful in such complaints, and, putting the theory to the test in clinical practice, he found that great advantage was derived by patients from the use of the hippurate and benzoate of sodium in cases of gout; so much so that patients asked to be allowed to continue the use of the remedy.

Therapeutic Uses.—Hippurate of sodium acts advantageously on the mucous membrane of the bladder and its appendages, and where there is a tendency in the urine to become ammoniacal it is useful in checking it, urine containing hippuric acid being less liable to undergo decomposition than urine in which it is wanting. This healthy action on the mucous membrane probably influences beneficially the secretion of colloid matter, and may thus prove valuable in cases of gravel and calculus, since in these complaints the secretion of colloid matter is intimately connected with the formation of the deposit of urates. The salt is also likely to prove of service in some forms of eczema, which are closely connected with the presence of uric acid in the blood.

Preparation.—Hippuric acid can be prepared artificially by heating glycin with benzoic acid, but is obtained most easily by evaporating the fresh urine of cows or horses to about one quarter its volume, and then acidulating it with hydrochloric acid. The crude acid is then dissolved in dilute solution of sodium hydrate, the boiling solution freed from color by the addition of sodium hypochlorite, and the hippuric acid precipitated by hydrochloric acid, recrystallized from water, and saturated with carbonate of sodium; or it may be obtained by boiling the fresh urine of herbivora, with milk of lime, straining and evaporating, adding carbonate of sodium, and subsequently purifying the salt by crystallization. The dose of the salt is twenty or thirty grains three times a day.—*Midland Med. Miscellany.*

THE INFLUENCE OF THE LYMPHATIC GLAND IN THE CRURAL CANAL ON PHLEGMASIA ALBA DOLENS.—Mr. James T. Laflin writes to the "Lancet" as follows: "The above-named gland, forming on either side a most important link between the lymphatics of the trunk and lower extremity, is the most dependent part or base of the former, as it is the summit of the latter. It is admitted that phlegmasia alba dolens is caused by the absorption of septic matter from the system by the lymphatics of the pelvis. The germs thus absorbed set up inflammation. Inflammation produces local hypertrophy. To the anatomist it is evident that the lymphatic gland, occupying the innermost compartment of the sheath of the femoral vessels, is incapable of expansion, so completely is it bound down and limited by the various structures in its immediate neighborhood in any direction save outward. Externally it is almost in actual contact with the femoral vein, being separated merely by the septum—a film of the transversalis fascia—which practically offers no resistance. Inflammation having set in, the enlarging gland presses upon the vein, bulging in its walls. A projection being thus formed into the cavity of the vessel, an eddy or backwash in the current of blood is produced, and, consequent thereon, disintegration of the white corpuscles occurs, and phlebitis is set up. The limb now, owing to venous obstruction, becomes œdematous, having the bluish color and pitting on pressure, the first familiar characteristics of phlegmasia. Inflammation continuing, the stroma of the gland increases in density and chokes up its afferent lymphatics. Stasis of lymph occurs. The œdema loses its merely venous character, the limb becomes tense and hard, and will not pit on pressure—second familiar characteristic. Pain is a marked feature in the initial stage of this disease. In several cases under my observation, and in the communicated experience of many practitioners consulted by me on the subject, pain, deeply seated in the groin, has been the first symptom complained of. This fact is, to a certain degree, in favor of

the theory of the pathology of phlegmasia now proposed. In the whole system there is no other gland so situated that its enlargement could produce a train of events similar to what I have described. If any gentleman who has the opportunity of making a post-mortem examination of the body of a patient who suffered from phlegmasia would direct his attention to an examination of this gland, the result might confirm what at present is but a probability. The idea may be of practical value in this way, that, if the disease, as it manifests itself, be due to the tension of the fasciæ surrounding the gland, a subcutaneous division of its anterior investments would give it room to expand otherwise than directly into the femoral vein. Thus the phlebitis, with its certain inconvenience and possible danger to life, would be avoided."

THE TREATMENT OF SPINAL CURVATURE BY RECLINATION IN ITS EARLY STAGES.—Mr. Edward Lund, F. R. C. S., writes to the "British Medical Journal":

"I hope to exhibit, at the forthcoming meeting of the British Medical Association at Liverpool, a form of couch for the treatment, by reclamation, of spinal curvature in its early stage, and weakness of the muscles of the spine, which embodies in its action a principle of treatment for such cases too frequently overlooked.

"The couch which I have to recommend, and which will be shown at Liverpool, is designed to carry out by reclamation the same principle of treatment as operates in the method of vertical suspension, only in a more gradual and prolonged manner. I have called my couch a 'slippery couch,' and I think the construction and mode of action will justify the term. I have used it with marked benefit during the last few years, in more than thirty cases, in private practice. It is made in this way. A piece of wood is prepared, of suitable thickness, and about six feet long and eighteen inches wide. At about four inches from one end a hole is cut through the wood, of circular form and six inches in diameter, with its margin on one surface of the wood slightly beveled inward. This end of the piece of wood is to be the upper or higher part, when it is fixed at such an inclination by means of a block or cross-piece as to raise it about one foot at the higher end. It is well to have four wooden legs screwed on, one at each corner, the upper pair being longer than the lower in the same proportion; and to still further influence the angle at which the couch is to be used, by means of extra screw-holes in the wood; the longer pair of legs being brought nearer to the foot of the couch, a greater elevation can be secured. The flat piece of wood, being so prepared, is covered with several folds of soft, thick blanket to about two inches in thickness, the blanket being just the size of the wood on one surface only; over this a piece of well-polished black horse-hair cloth is stretched, and, being turned tightly over the edges of the board, is nailed underneath, so as to produce a smooth, somewhat soft, but yet slippery, almost polished surface. Where the blanket crosses over the hole already described, it must be cut across in two directions, longitudinally and transversely, and the horse-hair cloth should be left loose over the same spot, so that, if pressure be here applied, an indentation will be quickly made.

"Now, if a couch be prepared in this way, and placed at such an angle of elevation as I have here described, about one part in six of its length, a person lying upon it on his back will soon find, unless he make some effort to resist, that he will quietly slide down toward the lower end of the couch; and, if his attention is otherwise absorbed, he will have his feet over the end of the board, as he is sliding beyond it. By a very simple device, this tendency to slide or slip downward may be very beneficially utilized for the object we have in view.

"A small, firm, cylindrical pillow is prepared, about the diameter of the wrist and a foot in length, and this is attached by strong tapes, one at each end of the pillow, and fixed to each upper corner of the couch, the length of the tapes being such as to place the pillow transversely on the board immediately below the lower edge of the hole in the wood. With this pillow in position, and the patient so placed that the pillow may be received into the recess of the nape of the neck, the projection of the occiput falling into the depression made by the hole in the wood, the body is retained in position, and the sliding down

is prevented, but yet there is a constant gentle dragging action on the spinal joints from the weight of the pelvis and lower limbs, which will act most favorably in the required direction.

"It is desirable, when a patient uses this couch for the first time, that he should try it without the pillow; and, if needful, the elevation of the couch should be adjusted until the peculiar sliding movement is experienced. Then, with the help of the pillow, and the back of the head falling into the recess prepared for it, the patient will be aware of the principle upon which the couch is intended to act, and be more likely to continue its use.

"All other couches, such as the Hkley couch, and couches with a double angular bend to support the knees, or with a foot-piece against which the feet can rest, are entirely opposed in principle to the plan of this 'slippery couch.' Using them, the patient may feel rested, and experience some temporary relief; but I know of no way, by reclination, to secure a certain degree of spinal extension better than to fix the upper segment of the vertebro-cranial axis at one spot, and allow the weight of the lower part to induce direct 'self-extension.'"

ON CYSTOTOMY BY A MODIFIED LATERAL METHOD IN CERTAIN CASES OF ENLARGED PROSTATE.—In a recent number of the "British Medical Journal," Mr. Reginald Harrison, Surgeon to the Liverpool Royal Infirmary, says: "Within recent years I have had cases where it has been found expedient to make an opening into the bladder from the perinaeum, in preference to other measures, the usual means of relieving obstructed micturition, or the consequences arising therefrom, having failed or proving insufficient. I may premise by stating that, apart from those cases of obstruction complicated with circumurethral abscess, no such proceeding has been undertaken on the sole ground that catheterism was impossible, though some difficulty connected with the performance of the operation has, with other circumstances, usually been present. The selection of a method for opening the bladder should have reference only to the object to be attained, or the contingencies that may arise. If, for instance, we desire merely to introduce the finger into it, as a preliminary to extracting a small stone, the median operation answers perfectly; while, if a larger stone, or an unknown quantity of anything, has to be dealt with, the lateral incision will, as a rule, be preferable. It has been advanced by those who favor the median incision, which is practically a urethrotomy, that it is both simple and safe; its admitted disadvantage lies in the comparatively small space it provides for manipulating and extracting; while, on the other hand, the lateral incision, though affording more room, is considered to be attended with an increased risk and a greater degree of difficulty, so far as its performance is concerned. The median operation need not necessarily involve anything more than the opening of the membranous urethra. The completed lateral operation further includes the division of structures constituting the neck of the bladder; and it is to this part of the proceeding that any increased risk or difficulty is to be attached. A little reflection shows that it is possible to closely assimilate the lateral with the median operation; that is to say, to dispense with the incision, not to the staff, but along the staff, should it be found, on exploration with the finger, that the additional room which the latter part provides is unnecessary for the object in view. It need hardly be said that this modification of the lateral method, where it is found, on digital exploration, to be feasible, frees the operator from executing the only portion of the operation to which any increased risk is attached; while, on the other hand, he has the consciousness that, should it turn out to be necessary, he can, by the completion of the deep incision along the staff, avail himself of all the advantages which are conceded by surgeons to the lateral method of opening the bladder." Mr. Harrison illustrates his method by the description of a case.

CANNABIS INDICA; A VALUABLE REMEDY IN MENORRHAGIA.—"Indian hemp," says Mr. J. Brown, of Bacup ("British Medical Journal"), "has been vaunted as an anodyne and hypnotic, having the good qualities of opium without its evils. Also in dysmenorrhœa and insomnia it has proved of much benefit. The drug has almost invariably produced some marked physiological effect, even in small doses. Text-books give the dose as ten minims and upward, but five minims is the largest dose

that should be given at first. If bought from a good house, the drug is not inert or unreliable. A drug having such marked physiological action ought to have a specific use as a therapeutic agent. Indian hemp has such specific use in menorrhagia—there is no medicine which has given such good results; for this reason, it ought to take the first place as a remedy in menorrhagia, then bromide of potassium and other drugs. The *modus operandi* I can not explain, unless it be that it diverts a larger proportion of blood to the brain, and lessens the muscular force of the heart. A few doses are sufficient; the following is the prescription: R tincturæ cannabis indicæ, ℥ xxx; pulvis tragac. co., ʒj; spiritus chlorof, ʒj; aquam ad ʒij. One ounce every three hours."

Dr. Robert Batho, of Castletown, Isle of Man, writes in the same journal: "Considerable experience of its employment in menorrhagia, more especially in India, has convinced me that it is, in that country at all events, one of the most reliable means at our disposal. I feel inclined to go further, and state that it is *par excellence* the remedy for that condition, which, unfortunately, is very frequent in India. I have ordered it, not once, but repeatedly, in such cases, and always with satisfactory results. The form used has been the tincture, and the dose ten to twenty minims, repeated once or twice in the twenty-four hours. It is so certain in its power of controlling menorrhagia that it is a valuable aid to diagnosis in cases where it is uncertain whether an early abortion may or may not have occurred. Over the hæmorrhage attending the latter condition it appears to exercise but little force. I can recall one case in my practice in India where my patient had lost profusely at each period for years until the tincture was ordered; subsequently, by commencing its use, as a matter of routine, at the commencement of each flow, the amount was reduced to the ordinary limits, with corresponding benefit to the general health. Neither in this, nor in any other instance in which I prescribed the drug, were any disagreeable physiological effects observed."

FLOATING KIDNEY.—At the meeting of the Glasgow and West of Scotland Branch of the British Medical Association, held June 29, 1883, Dr. Newman gave a short account of four cases of movable kidney, one in a male and three in females. In one of these cases he performed the operation of nephrorrhaphy with very satisfactory results. Previous to the operation the patient suffered severe renal pain on the right side, associated with persistent nausea and vomiting, so that she had not been out of bed for full two years. After the operation the symptoms disappeared, she was able to take a considerable quantity of food, her general health had greatly improved, and she could now take moderate out-door exercise. In another case the patient suffered from the same symptoms as the one above described, and, in addition, symptoms referable to strangulation of the right ureter, and persistent albuminuria. The urine contained a small quantity of albumin and granular and hyaline tube casts. While the patient was under observation, the right kidney diminished considerably in size, so that the question was raised whether or not the albuminuria was due to disease of the movable kidney alone. The only method of determining this with accuracy seemed to be to procure separate samples of urine from each kidney. This was done by introducing a small electric light into the bladder along with a speculum. The orifices of the ureters were thus easily seen, and, two catheters being introduced, one into each ureter, the urine was allowed to flow into separate vessels, and afterward examined chemically and microscopically. The result of this examination was to show that both kidneys were in a diseased state, and therefore an operation was not considered advisable. Both the cases described were in females.—*Glasgow Med. Jour.*

REMOVAL OF THE THYROID GLAND.—At a recent meeting of the Surgical Section of the Academy of Medicine in Ireland ("Dublin Journal of Medical Science") Mr. Thornley Stoker read a paper on removal of the thyroid gland in cases of bronchoecle. He detailed the case of a boy on whom he had himself operated, the disease being the most extensive of which he could find any operative record. The tumor extended nearly from ear to ear, and hung down nearly as low as the navel. He removed two thirds of the mass, comprising the right lobe and isthmus, in March, 1882, and the remainder on the left

side a year later. Complete recovery followed the first operation, but the patient died five days subsequent to the second from pulmonary thrombosis. The patient was incompletely cretinish, but developed greatly after the first operation. Mr. Stoker showed that while ten or twelve years ago the ablation of the thyroid gland for disease had been practically abandoned, during the last decade a revulsion of surgical feeling on the subject had occurred, and that now it should be held justifiable, as the result of late experience, to perform the operation, the patient so desiring, not only in cases where the disease threatened life, but where discomfort or disfigurement existed and minor treatment had failed. He emphasized his argument by quoting a series of cases from the practice of various surgeons, commencing in 1871 with the late Dr. William Warren Greene, of Portland, Me., whom he regarded as the pioneer of the most modern opinion on the subject. The freedom with which the operation had of late been undertaken was, he thought, in part due to the results of Listerism, and in part to the greater boldness which increased knowledge and improved appliances had generated in the surgeons of our day.

THE THERAPEUTIC VALUE OF NERVE-STRETCHING IN TABES DORSALIS.—Mr. Stokes read a paper at a recent meeting of the Medical Section of the Academy of Medicine in Ireland ("Dublin Journal of Medical Science"), in which he commenced by pointing out that the evidence afforded by the cases of tabes dorsalis treated by nerve-stretching indicated the fact that relief from some of the most distressing symptoms of that disease might, if the operation be performed sufficiently early, be anticipated. He considered that the absence of a physiological explanation as to how the operation acted was no reason for its rejection, and gave instances of other operative procedure of which the *modus operandi* was as yet unexplained. The particulars of two well marked examples of the disease treated by him—in one of which he stretched the sciatic nerve on one side, and in the other on both sides—were then given. Although the operations were not followed by any signal improvement in motor power, the results in other respects, as regarded relief from lightning pains, vesical irritability, and return of sensibility in certain regions of anæsthesia, were satisfactory and encouraging. The views of various writers on the effects of stretching on the nerves were discussed, and those of Ceccherelli shown to be at variance with the results obtained in the author's cases, and also with the experience of Dr. Brown-Séquard. Then Mr. Stokes discussed the importance of estimating accurately the amount of force that should be used, and was of opinion that a very moderate amount was sufficient to obtain the desired therapeutic results. He also stated his belief that many of the recorded failures of the operation were to be attributed to the employment by the surgeon of an undue amount of force. He advocated the use of an electric cord and dynamometer in nerve-stretching, and believed that in the case of the larger nerves a force of about ten pounds would be found sufficient. Although a satisfactory physiological explanation as to how nerve-stretching produced the results observed was still to be obtained, we were not wholly in the dark. He quoted Dr. Brown-Séquard and Dr. Charlton Bastian to show that after the operation a certain amount of vaso-paralysis was produced, resulting in vascularity and increased temperature of the part, and that the improvement which occasionally followed the operation was probably connected with these phenomena.

A REMARKABLE MONSTROSITY.—Dr. Mulvaney ("British Medical Journal") describes the case of a primipara, aged twenty-eight, who had been some hours in labor. It was a breech presentation, and favorable progress had been made until the pelvic outlet was reached. There the head became jammed tightly, and during the next two hours did not advance in the smallest degree. As the pains were ceasing, notwithstanding the administration of ergot, it became necessary to deliver instrumentally. Several attempts at extraction by forceps proved futile, and, as exhaustion was threatened, the blunt hook was employed, and, after an hour's hard work, delivery was accomplished. The child was a full-grown anencephaloid male; life was extinct but very recently. The bones of the face were normally developed, but there was no calvaria. The cerebral substance was wanting, and its place was filled with bloody serum and a material which looked like a placenta; to

this the placenta proper was attached by its membranes. It was very large, measuring $6\frac{1}{2}$ inches by $3\frac{1}{2}$ inches, and was deeply fissured at its anterior third. Two abortive cerebellar lobes were present. At the upper portion of the spine there was an opening into the spinal canal, from which sprang a lobulated body. Four cords were present, three focusing at this point; one running from the placental cerebral substance, the other from the placenta, and the third joining the cord proper, a few inches from the umbilicus; the fourth passed from the placenta in the usual way, and presented a slight degree of fatty degeneration. It was rather large. The other cords had undergone fatty degeneration to a great extent.

THE BACILLUS OF TUBERCULOSIS IN AN ABSCESS NEAR THE ANUS.—Dr. Robert C. Smith writes in the "British Medical Journal": Six months ago a young clerk, aged twenty-one, came under treatment for hæmoptysis and other signs of phthisis. After about three months' treatment he became strong enough to resume his employment, at which he continued up to the commencement of this month. I saw him on the 5th, when he was suffering acutely from an abscess in the neighborhood of the anus; and, fearing lest it might burst into the bowel and give rise to a painful blind internal fistula, I opened the abscess at once and let out a quantity of thin, curdy, foetid pus. A microscopic examination of this fluid by a half-inch object-glass, after the usual process of staining, revealed the presence of great quantities of well-marked typical tubercle-bacillus. Now, the presence of these organisms in this situation is interesting, as they tend to throw some light on the well-known connection between fistula and phthisis.

A NEW MODE OF BURIAL.—At the recent general assembly of cement manufacturers at Berlin, says the "Lancet," Dr. Frühling described a new application of cement. He explained that it would be easy to transform corpses into stone mummies by the use of Portland cement, that substance, when hardened, not in any way indicating the organic changes going on within it. He further illustrated the subject by describing various industrial uses of lime as a preventive of decomposition. The cement in hardening takes an accurate cast of the features which it incloses, thus allowing of their exact reproduction after the lapse of centuries. It is suggested to use coffins of rectangular shape, it being further considered by Dr. Frühling that underground sepulture is needless, as the coffins soon become practically masses of stone, and can therefore be built into pyramids.

ARMY INTELLIGENCE.—*Official List of Changes of Officers of the Medical Department, United States Army, from July 7, 1883, to July 14, 1883.*—BAILY, E. I., Colonel and Surgeon. In addition to his present duties, to take charge of the office of Medical Director, Military Division of the Pacific, during the absence of the Medical Director. Par. 2, S. O. 64, Military Division of the Pacific, June 30, 1883. — SUTHERLAND, C., Colonel and Surgeon, Medical Director Military Division of the Pacific. Granted leave of absence for one month, with permission to apply to the Adjutant-General of the army for extension of two months. Par. 1, S. O. 64, Military Division of the Pacific, June 30, 1883. — CAMPBELL, JOHN, Lieutenant-Colonel and Surgeon, Medical Director Department of the South. Leave of absence on surgeon's certificate of disability granted by S. O. 50, Department of the South, May 21, 1883. Extended one month on surgeon's certificate of disability, with permission to leave the Department of the South. Par. 7, S. O. 156, A. G. O., July 9, 1883. — PERLEY, HARRY O., Captain and Assistant Surgeon. Assigned to duty at Fort Pembina, D. T. Par. 1, S. O. 118, Department of Dakota, July 5, 1883.

NAVAL INTELLIGENCE.—*Official List of Changes in the Medical Corps of the Navy for the week ending July 14, 1883.*—Medical Inspector A. Hudson, Assistant to Bureau of Medicine and Surgery, and Passed Assistant Surgeons S. H. Griffith and E. H. Green, granted leave of absence for one month.

SOCIETY MEETINGS FOR THE COMING WEEK.—*Tuesday, July 24th:* Medical Society of the County of Kings, N. Y.; Medical Society of the County of Otsego, N. Y. (Cooperstown—annual); Ogdensburg (N. Y.) Medical Association. *Wednesday, July 25th:* New Jersey Academy of Medicine (Newark).

Original Communications.

NOTES ON

THE ESSENTIAL NATURE OF

DIABETES MELLITUS VULGARIS.

By F. EKLUND, M. D.,
STOCKHOLM, SWEDEN.

By the most meritorious experimental researches, executed especially in the last decennium for the purpose of investigating the true causes of diabetes mellitus, by exact clinical observations and scrupulous examinations of the alterations of nutrition in diabetics, a great many valuable facts, like the refracted beams of a prism, have been gathered, but, nevertheless, we must even to-day complain, with Salkowski and Leube,* that the disease in question is indeed a dark enigma. After giving some concise citations,† I will, however, try to show that it is possible, by reassembling some refracted beams, to gain a solid point of issue in order to suggest a theory in most respects satisfactory as to the essential nature of common diabetes mellitus. This theory I will essay to support by my own experience of the disease in question, by microscopical examinations of the urine and the other excretions, by analogies collected from pathological histology, vegetable physiology, and special animal parasitology, by an exposition in a few theses of the properties of the yeast-cell as shown by my own unassuming but exact experimental researches.

Furke‡ says that diabetes arises spontaneously in men in consequence of pathological conditions which are unknown still to-day. It is evident that these mysterious causes may be arranged under the two categories: local circumstances, and personal faults (Parkes). Yet, before pursuing the development of the matter in this direction, I will state that the urine of diabetics, quite fresh, gathered with all necessary precautions not to be deceived, contains yeast-cells as a rule that, I believe, are indeed excreted from the kidneys in the same manner as all the other vegetable miasms; for example, the *Torula morbillorum*, the *Plax scindens*, the *Micrococcus phthisis irritans*, the *Limnaphysalis hyalina*, and so on, while, on the contrary, not one yeast-cell is present in the fæces of the diabetic. Thence I regard myself authorized to infer that yeast-cells are constantly to be found in the circulating blood, and constitute integral parts of some, or of the most, or perhaps of all the organs of the body in diabetics. These yeast-cells are identical with the *Saccharomyces minor, ellipsoideus* (and *apiculatus*).

As to how the yeast-cells may have entered into the innermost parts of the body—for example, the liver—the experience of Senator# and my own teaches that disorders of digestion play an important part in many cases. Cornil and Ranvier|| tell us that during acute catarrhal gastritis the

epithelium of the stomach is completely detached, and that the superficial network of capillaries shows a very notable distension. It is indisputable that these pathological states, considering, moreover, the considerable accommodative faculty of the yeast-cell and its buds, are local accidents of high importance for the entrance of the yeast-cells into the blood-vessels of the stomach, and, further, into the system of the vena porta. In an analogous manner the infectious diseases—as ague, measles, scarlet fever, and so on, which produce, besides, a universal debility of the organism—prepare the way for the yeast-cells to grow into the stomach as a miasm. That this peeling off of the epithelial cells, just now mentioned, facilitates the penetration of such extremely minute particles as germs, etc., pemphigus of the mucous membrane of the stomach gives us an example. In the cicatricial texture, after the superficial ulcerations, Chalvet* has observed deposits of subnitrate of bismuth, which were formed there during the period of activity of the ulcers.

A striking analogy among the vegetables is afforded by ripe cherries, whose outside is found everywhere overspread with yeast-cells by thousands. It is not until the cherries begin to wither and grow musty that the buds of the yeast-cells can penetrate the weakened cuticle and produce fermentation.

By the by, I will remark here that, if during the above-mentioned diseases yeast-cells are observed in the urine, this signifies that the patient is in great danger of becoming diabetic, if he can not eliminate the yeast-cells as he recovers. The destruction of these can even be effected by apnœa if they, in their struggle for existence, lose the power to appropriate to themselves the hæmoglobin of the red blood-cells loosely combined with oxygen. Upon an average, the living plasmas and tissues, on the setting free of the oxygen from the red blood-corpuscles, have a much greater affinity for the oxygen than the yeast-cells, which explains the great difficulty for the latter to bud and multiply in the living body. On the other hand, the very often almost unavoidably fatal consequences for the human body of the nestling down of the yeast-cells in the liver, where they not only partly prevent the dehydration of grape-sugar into glycogen, probably even by hastening the blood circulation, but also and especially change the liver-glycogen to grape-sugar, and their spreading from the liver with the circulating blood to the other parts of the body, are chiefly dependent on the property of their protoplasm to act as an analytical or hydratative ferment on the liver-glycogen, formed itself, as well as the fat, by an analytical process, consisting in decomposition of protoplasmatic matters,‡ whereof the hæmoglobin in the blood of the liver probably constitutes the mother substance,§ from which the glycogen, the urea, and the coloring matters of the bile are derived,* as by synthesis of grape-sugar.

* "Die Lebre vom Harn," Berlin, 1882, S. 394.

† See Appendix.

‡ See Appendix.

H. Senator, "Diabetes Mellitus," in v. Ziemssen's "Handbuch der speciellen Pathologie und Therapie," xiii Band., erste Hälfte, Leipzig, 1879, S. 400.

|| Cornil et Ranvier, "Manuel d'histologie pathologique," tome deuxième, Paris, 1882, pp. 278, 279.

* Cornil et Ranvier, *op. cit.*, p. 287.

† Senator, *op. cit.*, S. 476.

‡ Von Wittich, in L. Hermann's "Handbuch der Physiologie," fünften Band, zweiten Theil, 1 Lieferung, Leipzig, 1881, S. 376.

* Possibly this increased annihilation of hæmoglobin explains the diminution of oxygen appropriated during diabetes (von Wittich, *op. cit.*, *loc. cit.*).

In an analogous manner we see in the vegetables—for example, in unripe peas*—the dissolved albuminoid matters, resembling the cereal in of gluten, produce the hydration of the starch to sugar, and this effect ceases simultaneously with the hardening of the albuminates, when the sugar is dehydrated again to starch. On the liver-glycogen the yeast-cells exercise their influence so much easier by reason of the abundance of dissolved albuminates and their derivatives, which deliver an almost unconsumable material for the production of a diastatic ferment, that is formed by means of end- and exosmotic exchanges through the cellular membrane of the saccharomyces, simultaneously with which the dissolved albuminates facilitate the access of the ferment of the yeast-cells to the glycogen by the softening of the envelope of the glycogenous sacs.

Yet to-day much obscurity prevails on the essential nature and the mode of action of the protoplasm and the brilliant corpuscles on the germs of the yeast-cells, and divergent opinions contest with each other as eagerly as at any time to gain the superiority. Under such circumstances, I will, in order to support my theory, only allege the following, by approved authorities, as valid, confessed scientific truths and facts:

1. For the transformation † of starch and of cane-sugar into grape-sugar within the vegetable and the animal organism the active substance is a soluble ferment; that is, secreted from the yeast-cell and identical with that which is present in the small intestine of animals, where it plays an analogous part.

2. The pancreatic diastase ‡ possesses the faculty of metamorphosing to sugar and to dextrin as much as forty thousand times its own weight of starch.

3. The morphological ferments* have a higher organization, and operate, according to unanimous opinion, more speedily and regularly than the amorphous. Consequently, to convert 40 gm. of starch to sugar, rather less than 0.001 gm. of yeast-cells is sufficient; to change 50 gm. of starch, less than 0.00125 gm. of yeast-cells is enough, and so on.

4. It is only when not growing that the yeast-cell effects fermentation,|| because the yeast-cells are active ferments only when deprived of free oxygen and obtaining^ as azotic nourishment albuminoid matters—that is to say, the products of metamorphosis and disintegration of these last mentioned, inasmuch as the easily soluble and diffusible derivatives of the albuminates (for example, the peptones, diastase, and syntonin, finally even allantoin, urea, uric acid, and guanine) constitute perfectly appropriate aliments for the yeast-cells.

5. Sometimes repeated access of free oxygen ◇ is in some

* Jules Arnaud, "Nouveaux éléments d'hygiène," Paris, 1881, p. 812.

† W. Roberts, "Les ferments digestifs," in "Revue internationale des sciences biologiques," par I. L. Le Laressan, Paris, 15 août, 1881, p. 92.

‡ Roberts, *op. cit.*, p. 109.

* Léon Marchand, "Botanique cryptogamique des ferments," 1883, p. 368.

|| A. Hiller, "Die Lehre von der Fermentation," Berlin, 1879, S. 391.

^ Hiller, *op. cit.*, p. 397.

◇ Ibid., p. 406.

measure a capital condition for the renewal of the life of the yeast-cell, which otherwise would die.

6. Fermentation* represents in no wise a simple process of vegetation and alimentation of the yeast-cell, but it may, under some circumstances, show opposite states of things—viz., form much yeast and hydrate little glycogen, or form little yeast and hydrate much glycogen.

7. If † to a mixture of yeast, water, and common starch, which is unboiled and its cells consequently uninjured, we add a very little of an infusion of any grain whatever, prepared with cold water, we shall find that in this infusion the soluble albuminoids undergo the action of the yeast, and are decomposed from their complicate molecular structure to the condition of a less complex molecule. In other words, they are less colloid and gummy; they are more unstable. This particular molecular modification is the result of the influence exerted upon them by the yeast; so altered, these albuminoids gain the faculty of penetrating the wall of the starch-cell, and thereby effecting the hydration of the starch. The sugar is produced by the intervention of the soluble albuminoids in wheaten meal. From this, one is authorized to infer that the yeast-cell alone is impotent to penetrate as far as to the starch in the cell, and that the effect produced by the yeast is only indirect. This action consists, above all, in the change of the form of the soluble albuminoids, and ultimately in facilitating their penetration through the walls of the starch-cell.

8. If we inquire why the sugar in the blood proceeds no further in fermentation—viz., to alcohol—Thudichum‡ answers: Because the blood serum shows an alkaline reaction. The yeast itself is always acid.*

9. The most favorable temperature|| for the fermentative process is +25° C. to +30° C.; but, according to Marchand,^ the temperature at which most protoplasms unfold their maximum of activity varies between +35° C. and +40° C.

10. Saccharomyces does not lose its vitality ◇ at -113° C., nor at +130° C.

11. According to Ehrenberg,† a single microbe can produce one million of the same sort in a day, and in four days one hundred and forty billions, which represent almost two cubic inches.

12. The yeast-cells ‡ destroy the best aliments, and products arise that contain a smaller quantity of potential energy. The yeast-cells possess at the same time a synthetical and an analytical faculty. In the former case they compose the proteinic matters of sugar and ammonia proper for their nutrition; in the latter case they influence the soluble albuminoids to form a less complicated molecule.

* Hiller, *op. cit.*, pp. 428, 429.

† Graham, "La chimie de la panification," in Le Laressan, *op. cit.*, 15 décembre, 1881, p. 530.

‡ Thudichum, "Pathology of the Urine," London, 1877, p. 428.

* Schützenbergen, "Les fermentations," Paris, 1879, p. 134.

|| Hébt, "Manuel de chimie organique élémentaire," Paris, 1880, p. 656.

^ Marchand, *op. cit.*, p. 407.

◇ Ibid., p. 408.

‡ Ibid., p. 16.

† Langen, "Physiologie," Berlin, 1881, S. 64.

13. The large group of ferments* consists of destroying, consuming cryptogams, which effect combustion of oxygen by their respiration. Whereas they are deprived of chlorophyll, and can not produce organic matter for themselves, they are forced to live at the cost of those which produce hydrates of carbon; wherever they find this combination they appropriate it to themselves, producing disease of the organism in which they grow, devouring it little by little, and turning it into their own substance.

14. As an evidence† that the exposition given in the last paragraph possesses validity and application even to the saccharomyces, I will quote the following example as an analogy from the animal kingdom:

The sacculina, the parasite of the crab, is in its turn attacked by a parasitic disease that effects its atrophy and eventually its complete destruction. S. Jourdain has sometimes hit on these sacculinæ, in the last stages of pathological regression, measuring only 0.002 or 0.003 μ in diameter, which were distinguishable from the young of the same collection by the blackish furfuraceous pigment with which they were covered then. The stomatorhizæ—that is, the root-formed prolongations, which proceed from the anterior pole of the genital sac of the sacculina carcini—appear to be filled up by a saccharomyces, which is sharply defined from the mycoderma viri and the saccharomyces cerevisiæ with which S. Jourdain has compared it. It buds and multiplies like the saccharomyces. Moreover, every one of the poles, which correspond with the longest axis of the cell, can emit a mycelium-shaped prolongation, that S. Jourdain has succeeded in following in its evolutive cycle. All the cryptogamic cells that S. Jourdain has cultivated in the humid chamber in the midst of a saccharine fluid have emitted, without exception, this double prolongation, whose evolution requires possibly a change of the medium. Often these yeast-cells have appeared associated with porosperms of variable dimensions.

From these general considerations we are naturally led to answer the question concerning the occurrence of the saccharomyces minor and ellipsoideus in the common substrata of material life. Microscopical examinations have brought to light that these are to be found in the drinking-water in Sweden in sundry places where diabetes is observed sporadically, together with greater or smaller colonies of a species of extraordinarily subtle bacilli, whose diameter is 0.5 μ , the length of each individual varying from 2 to 3, 4, 5 μ and more. They are articulated, and hang together in long rows. If it is to the action of this microbe that we must impute the production of acetone in diabetes, or if, together with the saccharomyces-cells, it contributes to hasten the decomposition of the albuminoid matters in diabetics, is impossible to decide to-day. The local essential conditions are, of course, in some measure, quite the same as those which produce some other infectious diseases; as, for example, the ague, scarlet fever, and so on. The relative rarity of diabetes in comparison with the last-mentioned epidemic diseases might have its explanation in

the great difficulties even for the growing yeast-cell to penetrate the normal mucous membrane of the stomach and of the intestines. In the fæces I have, as a rule, in diabetes found no yeast-cells. In the cases in which no saccharomyces cells can be detected (by accident) in the urine, the protoplasmatic corpuscles (the brilliant germs) of these may be observed, surrounded by a little protoplasm. Under favorable circumstances, i. e., the presence of urea, oxygen, and sugar, the protoplasm is augmented, and the germs are enveloped with a membrane of cellulose.

The "personal faults" play a particularly important part in the production of diabetes. The principal and most frequent are errors in diet, as immoderate eating of amylaceous foods or saccharine fruits, with consequent disorders of the digestion and a faulty composition of the blood and of the other humors of the human body by the wrong direction of the whole nutrition and assimilation; abuse of spirits, by which the human organism is converted into an arid dough, where the yeast-cells act almost the same disastrous part as the spark of fire in the powder-room; further, want of bodily exercise, profoundly agitating emotions of the mind, and so on. In the very same places where, as for example in Ceylon and the Thuringian Forest, the local essential and the predisposing personal influences are more often combined—that is to say, where the inhabitants make an immoderate use of saccharine fruits, whose surface is covered with energetic yeast-cells (*Saccharomyces apiculatus*), diabetes is more frequent.

It is well known that the inulin of the artichokes of Jerusalem resembles glycogen the nearest of all amylaceous matters. By digesting thin slices of such artichokes at a temperature of + 37° C., together with yeast-cells, their amount of sugar is considerably augmented in a few minutes. Under the same conditions the liver of fresh oysters, rich in glycogen, shows a manifest reaction of grape-sugar.

The mild cases of diabetes are cured by means of an exclusively animal diet, much bodily exercise, alkalies, hydrotherapy and sol. iodi spirit.; ten minims in sweetened water thrice to four times every day. The severe cases are all incurable, although we know that phosphorus and arsenic annul the glycogenic function of the liver, and iodine and also many other substances (without the living organism) annihilate the fermentative faculty of the protoplasm of the yeast-cells.

APPENDIX, CONTAINING THE CHIEF THEORIES OF THE NATURE OF DIABETES MELLITUS.

1. The essential cause of diabetes is, according to Tunke,* the exceeding accumulation of grape-sugar in the blood; this accumulation, itself, again may arise in different manners. 1. It may be produced directly by injection of solutions of sugar into the blood; 2. It arises spontaneously in men during, for the present, unknown pathological conditions; 3. It appears as a consequence of some lesions of the nervous system; and 4. As the effect of the influence of some poisons on the nervous system. Lesion of the medulla oblongata at a definite spot in the floor of the

* Marchand, *op. cit.*, pp. 19, 96, 114.

† I. L. Le Laressan, "Revue internationale des sciences biologiques," 15 juillet, 1881, pp. 82, 83.

* Otto Tunke's "Lehrbuch der Physiologie," Leipzig, 1876, 1 Theil, S. 153.

fourth ventricle (at the apex of the calamus scriptorius), section of the spinal marrow at different heights, poisoning with curare, at the same time sustaining the blood circulation by means of artificial respiration, yet only with incomplete inflation of the lungs, effect diabetes (justly and properly * called a transitory mellituria). It is proved that in all these cases the sugar which is accumulated in the blood is liver-sugar. But from this it follows that the forms of diabetes mentioned depend either (1) on an increased metamorphosis of the already present liver-glycogen into sugar, or (2) on a lowering of the processes which normally annihilate sugar, either in the blood or in the textures, so that their extinction must, of course, produce an accumulation of the said matter in the fluids of the body.

2. According to Claude Bernard,† the cause of diabetes is an increase sometimes of the whole function of the liver, sometimes only of the change of the glycogen present into sugar in consequence of an active congestion of the liver, depending on a paralysis of its vaso-motor nerves.

3. Schiff‡ argues that a hyperæmia produced by paralysis of the vaso-motor nerves in any considerable vascular area causes the formation of a ferment which is not to be found in the normal blood, but which within the liver changes the glycogen into sugar.

4. Pettenkofer and Veit* declare the cause of diabetes to be, that with a normal synthesis of glycogen in the liver the decomposition of the sugar produced is retarded or suppressed by impeded oxidation in the blood, but neither is the fundamental fact, the decomposition of the sugar, to be admitted, nor is the truth of the different hypotheses which are suggested to explain the causes of the pretended checking of the oxidation demonstrated.

5. Tscherinow,|| who regards the liver as a sugar-destroying organ whose physiological object is the metamorphosis of sugar into glycogen, maintains the view that in diabetes the energy of the liver in the processes of oxidation (more properly, dehydration^Δ) is impaired.

6. According to Pavy,◇ the cause of diabetes in men is a paralytic dilatation of the vessels of the liver.

7. Trumet de Fontarce‡ thinks that the genuine diabetes is of paralytic origin, depending on dilatation and hyperæmia of the vessels of the liver in consequence of their privation of the contractile stimulation of the vaso-motor nerves. It is only a transitory glycosuria, certainly a pregnant symptom of diabetes mellitus, but never the real constitutional diabetes, that has been produced in an experimental way.

8. Senator↑ suggests that diabetes may arise: 1. From an abnormally augmented quantity of sugar in the chyle or in the blood of the vena porta, or in these two together.

* Eklund.

† Otto Tunke, *op. cit.*, S. 154.

‡ Ibid.

* Ibid.

|| Ibid.

Δ Eklund.

◇ Senator, "Diabetes Mellitus," in "Handbuch der speciellen Pathologie und Therapie," von Dr. H. v. Ziemssen, xiii, 1, Leipzig, 1879, S. 484.

‡ Trumet de Fontarce, "Pathologie clinique du grand sympathique," Paris, 1880, p. 212.

↑ W. T. Loebisch, "Anleitung zur Harnanalyse," Wien und Leipzig, 1881, S. 273.

This excess of sugar depends on an impeded metamorphosis into lactic acid of the sugar in the intestines, or on an accelerated resorption of the sugar. 2. The cause of diabetes is an abnormal acceleration of the circulation in the vena porta, whence generally more of the sugar ingested or derived from starch enters the liver. From this organ it is transported into the circulation, without having been metamorphosed into glycogen, but, moreover, the glycogen formed from sugar or other matters is transformed again more speedily and in more considerable quantities into sugar than it is carried away. 3. The cause is a diminution of the power to decompose the sugar which is introduced into the general circulation.

9. Zimmen* directs attention to the fact that hitherto, in interpreting the origin of diabetes, the muscles, where glycogen and sugar are formed, have not been taken into account, and, nevertheless, a muscle in repose, as we know, like the liver, stores hydrates of carbon in the form of glycogen in its tissue; during labor this glycogen is converted into sugar—that is, further decomposed into sarcolactic acid, and finally into carbonic acid and water. That the muscle during its activity destroys even the sugar circulating in the blood, is most evident from the cures that are effected of many diabetics by means of bodily exercise methodically used.

10. Cantani† says that diabetes mellitus is a disease of the nutrition, in which, without an abnormal production of sugar, this is not consumed as fuel in the organism. This resistance that the sugar in diabetes shows against the process of oxidation may proceed from the fact that the ferment which disintegrates the sugar either is totally absent or operates in an abnormal manner on the sugar and metamorphoses it into a combination on which the oxidizing forces of the organism are wholly inoperative. According to Cantani, the blood-sugar, the paraglycose, of diabetics is different from the normal blood-sugar. As the material seat of diabetes, Cantani admits in the first stage the pancreas, even the digestive glandules of the stomach and intestines; it is only indirectly that affections of the central nervous system, by influencing the chylipoietic organs, effect diabetes.

STOCKHOLM, SWEDEN, March 19, 1883.

PROF. ERCOLANI'S RECENT INVESTIGATIONS

OF THE

ANATOMY OF THE PLACENTA.

BEING A REVIEW OF THREE LETTERS ADDRESSED BY HIM TO PROFESSOR ALBERT KÖLLIKER.‡

By HENRY O. MARCY, M. D.,

BOSTON.

THE author believes that a new confirmation, by new observations, of the results which he has for many years been

* Loebisch, *op. cit.*, p. 273.

† Ibid.

‡ In the Report of the Academy of Sciences of the Bologna Institute, session of the 28th of January, 1883, there is an entry that the Academic Secretary, Giambattista Ercolani, Professor Emeritus, presented a work with the title "New Researches in Normal and Pathological Anatomy: on the Intimate Structure of the Placenta in Woman and in the Mammifera."

laying before the Academy upon this subject, will be in some degree acceptable to those anatomists who, in Italy and abroad, have confirmed his investigations by their own. He can not, however, fail to perceive that, notwithstanding his publications, and those more especially of Romiti in Italy, of Turner in England, and myself in America, the great majority of anatomists and obstetricians continue to hold as true the doctrines which others as well as himself have shown to be erroneous.

It was in England that the observations made by the author began really to enter the domain of science; and this because the illustrious Turner, with repeated investigations and numerous works published from 1871 to 1876, fully confirms all the fundamental observations which the author had published as early as 1868. Thus it has happened that many of the observations which really belong to him are attributed to Turner, and in the same way in Germany, those which he had much earlier made upon the so-called roots of attachment of the foetal villi in the placenta of woman are assigned to Langhans.

The author does not intend to reclaim for himself the priority of these observations, which indeed others have already attempted; as, for instance, Romiti, affirming that even illustrious German anatomists have published some of his observations without, however, crediting him.

Still less does he propose to show how, especially by some in France, an account of his labors has been rendered in a manner truly strange and very far from true—for time brings the remedy for these petty wrongs to which the votaries of science in Italy have for years been accustomed. In giving the results of his new researches, he has deemed that it might be, therefore, proper to inquire with some minuteness into the reasons which have led the opponents to erroneous views, placing in relief the uncertainties and the open contradictions which they are forced to accept as truth in following doctrines opposed to his own observations.

Unhappily, among those who are adverse to the observations of the author must be reckoned one of the most distinguished of anatomists and embryologists, Albert Kölliker. However regretfully, one is yet constrained to adopt toward him the ungracious office of critic, and to combat the teachings which he, the head of an illustrious and famous school, has given, as well on the placenta of the mammifera as on that of woman. This is so much the more painful to the author because, when his actual observations are confronted with the teachings of Kölliker's school, the discord appears so serious and far-reaching as to give to some minds ground for suspicion that the words used sound sharp, or less than reverent, toward the great anatomist. But facts, not words, make the contrast.

To remove even the shadow of this, which the author would consider an injurious suspicion, and to give clear and positive proof of the high esteem which he professes for the eminent anatomist, he wishes to address to Kölliker himself these new investigations in the form of letters, knowing well that true and great scientists live only for the search of truth and its development.

In the first of the letters the author shows the causes

by which the celebrated anatomical school of Kölliker was led into errors of opinion concerning the placenta in the non-deciduate and the deciduate mammiferous animals.

The first question which he discusses is: How and why is it, since all recognize and assert that comparative anatomy alone seems to clear away the doubts and the great obscurity that surround the exact knowledge of the intimate structure of the placenta in woman, and since all have pursued the same path, that, at the end, they are conducted to opposite conclusions? The author believes that it is because, though the way prescribed was the same, they yet traversed it in opposite directions, the point which for the one party was the beginning of the journey being for the other party its end. Thus, Professor Kölliker, seeking to elucidate the differences observed in the development of the placenta in the mammifera, takes as the basis of his opinions certain conceptions held as correct about the human placenta; while the author, laying aside every preconceived idea, and ascending in his researches from the simplest to the most complex forms of placentation observed in the mammifera, availed himself of the knowledge acquired to judge the more complex facts observed in the placenta of woman, which he found identical in structure with that of the superior simiæ.

Entering into details, he shows that, in the opinions held concerning the non-deciduate mammifera, the fundamental cause of error was this: that, to decide upon the existence of the organ in the uterus of the gravid females of the said mammifera, Kölliker set out with the preconceived idea that, if existing, it must present certain characteristics such as those exhibited in the human placenta—that is to say, a circumscribed structure and much vascularity, characters which are necessarily wanting in the non-deciduates, where the placenta is diffused, or which do not correspond with any exactness in cases where the placenta are multiple, as in the ruminants.

The admission of the preconceived general principle was, of necessity, followed by the error of affirming that the placental organ was wanting in these animals; while it was not the organ that was wanting, but there were wanting to the organ those characters of circumscribed mass ("mole") and great vascularity observed in the placenta of woman.

This first error necessarily led to a second—namely, the belief that, the placenta being wanting, the foetal villi were received into depressions (glands) which were formed in the swollen mucous membrane of the uterus.

On this subject the author refers to his past observations, which have had wide and repeated confirmation through investigations made by others in Italy and elsewhere, and by which it has been demonstrated that, after the act of conception, in some of the non-deciduates from the whole internal surface of the uterus, in others at some points only of the surface, the epithelium falls off, and from the denuded surface there takes place a new formation of cellular elements (decidual), from which are formed, according to the different animals, either crypts or true glandular follicles, into which the foetal villi enter; that the said follicles, new-formed after the act of conception

has taken place, remain in the uterus during the whole period of pregnancy, and disappear after parturition, the internal superficies of the uterus (the epithelial stratum of the mucous membrane being renewed) thus reassuming its condition prior to conception.

In the deciduate mammifera, in which the placental organ has either the zonarial or the discoidal form, there exist the two general characters inferred from the human placenta; and here the fundamental cause of the errors taught by the school of Kölliker comes from the supposition that, in these animals, as well as in the human placenta, that organ was developed by a transformation of the pre-existing uterine mucous membrane, with this difference only: that in woman the whole uterine mucous membrane was transformed, while in the deciduates it was only that portion of the membrane in which the placenta was developed.

The new observations made by the author on the uterine horn of the *Myoxus glis* (dormouse) in a state of repose, in the period of heat, during pregnancy and the forming of the placenta, and at various epochs after parturition, demonstrate more fully the fact, which he had previously remarked in gravid females of other mammiferous deciduates (rodents and insectivora)—namely, that in some of these it is the whole uterine mucous membrane that becomes swollen and enlarged in the period of heat, and that after the act of conception it is not only the epithelial stratum that disappears, but all the elements which compose the mucous membrane (submucous connective tissue, vessels, and glands) are completely destroyed to give place to a new formation of special cellular elements (decidual) from which the placenta will be formed. The new-formed parts being thrown off at parturition, the cavity of the uterus by degrees is clothed with a new mucous membrane, and so the uterus returns to the state in which it was before impregnation.

By these observations, which the author minutely describes and illustrates with plates, it is completely proved that in certain deciduates, at least, it is not a portion of the uterine mucous membrane that is transformed to produce the placenta, since this membrane, with its different component parts, is completely destroyed before the placental organ is formed. In other deciduates—as, for example, in the canidæ and the felidæ—the destruction of the uterine mucous membrane does not occur even in the places where the placenta is developed; the epithelial stratum alone disappears, and thus in these animals is witnessed a fact worthy of special notice, because it serves to explain the origin and the formation of the non-acciduous stratum of the placenta in woman.

In the canidæ and the felidæ the uterine mucous membrane is furnished with a thick layer of loose connective tissue, in the midst of which stand the numerous and long utricular glands. The decidual new formation in the place where the placenta is developed closes their discharging apertures, and, as the secretion in them does not cease, the moisture separated becomes accumulated in their interior, and in the midst of the connective tissue they become deformed, and acquire a degree of dilatation truly enormous.

In woman are repeated the same facts in the place where

the placenta is formed, but the local conditions differ, as we shall presently see.

Returning to the deciduates, the erroneous belief that the placenta was in these derived from a partial transformation of the mucous membrane would necessarily lead, as it did, to other and not a few errors of a secondary order. These the author exposes, demonstrating the profound differences observed in the intimate anatomical structure of the placenta of different deciduates, as well in those having the zonarial as the discoidal form; he rejects the general character indicated by the intimate structure of the organ for those mammifera—namely, that the two parts constituting the placenta are so intimately united that both are thrown off in the act of parturition, while in the non-deciduates only the foetal parts would be emitted, segregating themselves from the maternal parts.

This observation, which is due to Weber, is perfectly exact, but does not serve to distinguish the animals from each other. The author reviews the observations of others and his own, which show that in deciduates, as well in the zonarial as in the discoidal placenta, the relations between the two parts of the placenta are the same as are observed in the non-deciduates, which is of simple contact, and not of intimate union between the two parts.

Reviewing this first letter, it may be said that in the opinions held concerning the genesis and the structure of the placenta, both in the non-deciduate and the deciduate mammals, the school of Kölliker was led into erroneous conclusions from the preconceived idea that in all cases the mucous membrane of the non-gravid uterus took an active part, representing the maternal portion of the placenta as simply swelling or becoming hypertrophic in the non-deciduates, or becoming partially transformed in the places where the placenta is developed in the deciduates.

By his former and his recent investigations, however, the author, setting out from facts observed and followed in their minutest details, has arrived at the opposite conclusion, that neither the mucous membrane as a whole, nor any of the parts that enter into its composition, take an active share in forming the maternal portion of the placenta, and that in all cases this results from a new formation of special elements, to which the mucous membrane of the non-gravid uterus does not always serve as substratum.

An indispensable condition for the new formation is the denudation of the internal surface of the uterus, which is limited to the simple destruction of the epithelium in the greater number of instances precisely as was also observed in woman; but this indispensable destructive process extends in some of the mammiferous deciduates to all the parts that form the mucous membrane in the non-gravid uterus, and the new formation is, in this case, established directly upon the internal muscular surface of the uterus.

In the act, or subsequent to parturition, the new formation that constituted the maternal part of the placenta is always more or less carefully expelled from the uterus, and the process of renewal, in order to restore the internal superficies of the organ to its state previous to conception, stands in direct ratio to the course of the aforesaid destructive process.

It is with the new-formed decidual elements that the villi or fœtal vessels exclusively hold any relation.

In the non-deciduates this relation is one of simple contact; but this same relation has been likewise observed in mammiferous deciduates, whether they have the zonarial or the discoidal form of placenta. In all these cases the decidual elements acquire, as the pregnancy goes on, the form of a glandular organ more or less simple or complex; it is, therefore, not true that in the non-deciduates alone the fœtal part separates itself from the maternal. In the mole, which is deciduate, with the discoid form of placenta, the intimate structure of the organ is that of a cotyledon in the ruminants.

In many deciduates, and in those in which the two parts constituting the placenta are intimately conjoined, the decidual elements are proliferous, but remain always in the state of cellular elements, and it is solely and exclusively with these that the vessels of the fœtal part come into relation.

Without prior decidual new formation there can in no case occur the development of the placenta, whatever the form it assumes in the different species of mammals. Based upon mistaken observations of facts, the fundamental division of the mammifera into deciduates and non-deciduates was accepted by zoölogists.

On this important point, however, the author thinks no further discussion necessary, since the illustrious founder of the said distinction, Professor Huxley, has done him the honor of writing to him that he, too, has abandoned the distinction indicated. The nature of the present work, moreover, permits the author to touch merely, in passing, upon observations heretofore published, to show how the great differences of structure remarked in the placenta of vertebrate mammalia might readily reconduct to a unity of anatomical type—an anatomical unity to which the physiological unity corresponds—the fœtal part, namely, or absorbent surface in contact with the maternal part or secreting surface.

(To be concluded.)

SIX SURGICAL CASES

TREATED IN THE

MEDICAL MISSIONARY SOCIETY'S HOSPITAL.

By J. G. KERR, M. D.,

CANTON, CHINA.

CASE I.—TUMOR OF THE PAROTID SPACE.—A woman, forty-five years old, from the Province of Kwong-sai, was admitted to the Medical Missionary Society's Hospital, Canton, with a tumor of the right side of the face, extending from above the ear to the collar-bone, and from the corner of the mouth to the neck behind the ear. It was almost as large as her head, and had been growing for eighteen years, until now the weight made it very burdensome, and she was anxious to have it removed. About four years ago she went to a hospital at Hankow, on the upper Yangtse, when it was about half as large; but for some reason the operation was not performed. The outer and lower part of

the tumor was ulcerated, and discharged a thin sanious pus. The tumor was excised on the 10th of August, Dr. Joseph



FIG. 1.

Thomson assisting. The skin was loosely attached and easily dissected; but there were several enlarged veins, from which some blood was lost. The attachments in the parotid space were deep and strong, requiring careful dissection; but they did not involve the sheath of the vessels. The arteries and veins at the base of the tumor, constituting its blood supply, were, of course, large, and, with all possible precautions and as much rapidity of dissection as was admissible, the loss of blood was great. On the completion of the operation, the patient was very much prostrated from shock and loss of blood. The application of hot bottles, stimulants, and the elevation of the lower extremities, brought about reaction. In a few days convalescence was decided, and the wound healed favorably. In two weeks she was able to walk about, and cicatrization was almost



FIG. 2.

complete. The wood-cuts, taken from photographs, show the appearance of the woman with the tumor and after its

removal. The weight of the tumor was four pounds. It was a glandular tumor, the irregularity of the surface indicating different lobes of which it was composed.

CASE II.—TUMOR OF THE PAROTID SPACE.—The patient was a woman, thirty-seven years old, resident in the city. The tumor was located on the right side of the neck, was movable, and supposed to be an enlarged gland. On attempting to remove it, the attachments in the parotid space were found to be very strong, and the sheath of the vessels involved. In the dissection, the internal jugular vein was wounded in two places, and it was tied above and below the openings. The tumor was found to be cancerous, and it was impossible to remove the whole of it. The wound, however, healed, the ligatures around the vein came away in due time, and no unfavorable symptom occurred during the convalescence.

CASE III.—HYDROCELE; CASTRATION.—A man was admitted with hydrocele, for the radical cure of which a few drops of strong carbolic acid were injected. The inflammatory swelling only partially subsided, and after two months it was decided to open the tunica vaginalis and close the secreting surface by granulation. On making the incision, September 25th, the testicle was found to be enlarged, disorganized, and one end converted into a dark gelatinous mass. It was at once excised, and the cavity healed by granulation. The disorganization of the gland was, no doubt, due to the carbolic acid, and, so far as one case goes, this shows the acid to be unsuitable for injection into the sac of a hydrocele.

CASE IV.—EXCISION OF THE RIGHT HALF OF THE LOWER JAW.—A man, forty-three years old, from Shun-tak District, was admitted with a tumor involving the entire right half of the lower jaw. The tumor invaded the mouth, pushing the tongue over to the left side, and threatening ere long to produce suffocation. The pressure of the tumor upon the teeth and alveolar processes of the upper jaw had pushed them out of position, so that the teeth were lying transversely across the roof of the mouth. The position of the tumor in relation to the deep parts at the base of the tongue could not be accurately determined; but, as it was steadily growing, and a few more weeks would certainly end in death, an operation was the only resource. It was performed, August 15th, with the assistance of Dr. Wales and Dr. Thomson. The deep attachments were such as to admit of dissection without injury to the important parts at the base of the tongue. The teeth of the upper jaw, lying across the roof of the mouth, were extracted. The tumor was fibrocystic in structure, and weighed one pound and a half. There was much prostration after the operation, severe vomiting continued for forty-eight hours, and there was an offensive discharge from the wound; but a favorable change took place on the third day, and at the end of a week he was able to sit up, and left the hospital, cured, on the sixteenth day. He was seen again all right at the end of a month.

CASES V AND VI.—BURROWING FISTULÆ OF THE GLUTEAL REGION.—Two cases of this disease have been under treatment during the year. It is not common in China, and must be rare in more civilized countries. One of the patients was admitted into the wards of the Medical Mission-

ary Society's Hospital with both buttocks honey-combed with fistulæ, sanious pus discharging from numerous openings. The disease usually begins with fistula in ano, extending outward, first on one side and then on the other, until the buttocks, on one or both sides, and the sacral region, are honey-combed. The skin is much thickened and hardened. It is attached at numerous points to the subjacent cellular tissue, all the intervals being pus-secreting surfaces. The tendency of the disease is to spread. In this case syphilitic contamination was the special causative influence, and it has been so in most of the cases that have come under my observation.

The treatment consists in slitting up thoroughly all the fistulous passages in every direction, cutting away the unattached skin, and leaving the points of union between the skin and subjacent tissue as centers of cicatrization. It is necessary, when the extent of surface is large, to operate several times, and the case under notice required about six months' treatment. It is, of course, necessary to combine anti-syphilitic remedies with the incisions.

A CASE OF STRANGULATED INGUINAL HERNIA

WITH AN UNDESCENDED TESTICLE.

By CHARLES M. CARLETON, M. D.,

NORWICH, CONN.

THE notes of this case were kindly taken by Dr. Sidney A. Fox, who was associated with me in practice at the time.

Charles M., aged twenty-three, single, and by occupation a farmer, came to me February 6, 1883, when the following points were obtained: He had had a right oblique inguinal hernia for the past ten years—supposed to have been caused by a kick in the groin. On making an examination, a large, painful tumor was found in the right groin, just internal to the external ring, and to the inner side of the tumor was a small, painful mass which proved to be an undescended testis. The patient stated that the hernia had been down for four or five hours, that it was growing larger and more painful, and that an attempt had been made to reduce it while he was partially under the influence of ether. He complained of pain in the region of the umbilicus, with almost incessant nausea and vomiting, and it was decided to etherize and reduce. Taxis having failed, everything being in readiness, it was decided to operate without delay. The operation was performed in the usual manner, and quite a knuckle of intestine was found, of a very dark color. After removal of the constriction the natural color returned, and the gut was replaced in the abdominal cavity.

It was deemed best to remove the testicle. The nerves (spermatic plexus) were carefully dissected from the remainder of the cord and divided with a scalpel. The cord was tied with a carbolized catgut ligature. The reason for not including the nerves in the ligature was to do away with the supposed danger of tetanus.

The wound was closed by interrupted sutures. An eighth of a grain of sulphate of morphine was given, and

the patient was directed to have a like dose every three hours.

February 6th, 11.15 P. M.—Pulse 72; temperature 98.5° F. About one pint of urine drawn with the catheter.

7th, A. M.—Pulse 72; temperature 98.5°. Patient has dozed nearly all night. No special pain or tenderness. Some tympanites. Has drunk about three pints of milk.

P. M.—Pulse 94; temperature 100.7°. Ordered the dressings to be kept wet with tincture of calendula.

8th, A. M.—Pulse 84; temperature 98.7°. Slept about six hours. Coffee, milk, and gruel constitute the diet.

P. M.—Pulse 72; temperature 99.7°. Complains of pain in the lumbar region, and there is some tympanites. Ordered an additional dose of morphine.

9th, A. M.—Pulse 72; temperature, 98.6°. Has passed a very comfortable night. Three stitches were removed; union seemed to be perfect. Ordered morphine ($\frac{1}{8}$ gr.) every four hours instead of every three hours.

P. M.—Pulse 72; temperature 100°.

10th.—Pulse and temperature normal. Four stitches removed. Some tenderness on pressure in the groin, also some fullness.

11th.—Ordered two grains of quinine every six hours. Pulse and temperature normal. Allowed solid food. To take a teaspoonful of compound liquorice powder at 9 P. M.

12th.—Bowels moved twice—for the first time since the operation was performed. Ordered two teaspoonfuls of the compound liquorice powder.

13th.—Bowels moved twice. Last stitch removed, and union seems to be perfect. Patient allowed to sit up.

14th.—Sat up nearly all day. Feels quite well.

15th.—Is dressed and down stairs. Walks about. Will be allowed to go to his home in the country in a few days.

It will be noticed that the temperature rose above 100° only once. The man's recovery was regarded as complete on the ninth day. No antiseptic precautions were used except to carbolize the instruments, together with my hands and those of my assistants.

Book Notices.

Diseases of Modern Life. By BENJAMIN WARD RICHARDSON, M. D., M. A., F. R. S., F. R. C. P., etc. New York: D. Appleton & Co., 1883. Pp. xii-520. [Paper; price, 10 cent-.]

THIS issue of Dr. Richardson's well-known work marks the highest development of that distinctively modern enterprise, the publication of a cheap medical literature. We say the highest development, for we doubt whether the public has ever before been offered so much in the way of sterling quality for so modest a sum of money as ten cents.

It is too late in the day to notice this work otherwise than as regards this special edition of it; readers of the journal are already familiar with its scope and character. Suffice it to say that we have read these 520 pages of clear and correct typography with much care. We have discovered little that is open to unfavorable criticism or question. There is, perhaps, an occasional readiness to settle doubtful and difficult scientific

problems off-hand, and we think the author's pessimism might have been judiciously leavened. The treatise is ostensibly written for the general public, and, in our opinion, it will be of most value placed in the hands of the non-professional reader. We do not know of any work so well calculated to instill sound views as to the nature and causation of disease, and, if physicians will circulate this book among their patients, it will redound to their interests and to the interests of scientific medicine.

Lectures on Cataract: Its Causes, Varieties, and Treatment.

Being Six Lectures delivered at the Westminster Hospital. By GEORGE COWELL, F. R. C. S., Senior Surgeon to the Westminster Hospital, etc. With Illustrations. London: Macmillan & Co., 1883. Pp. xv-126. [Price, \$1.50.]

THIS little volume of 126 pages consists of a series of lectures delivered at various times to the students at the Westminster Hospital. They are prefaced by a brief anatomical introduction, and an account of the development of the lens. The author first defines what is meant by cataract, and then describes the different varieties. He then considers the various operations which have been attempted for the cure or removal of the cataract, beginning with that of couching or reclination, and ending with Knapp's extraction by peripheral division of the capsule. He treats briefly of the antiseptic method of operating, and concludes with a short account of the treatment of cataract by the formation of an artificial pupil. The illustrations are fairly good, but they are not sufficiently numerous. The publisher's work is well done, the paper being good and the type clear.

BOOKS AND PAMPHLETS RECEIVED.

Sexual Impotence in the Male. By William A. Hammond, M. D., Surgeon-General, U. S. Army (Retired List); Professor of Diseases of the Mind and Nervous System in the New York Post-Graduate Medical School, etc. New York: Bermingham & Co., 1883. Pp. 274.

A Case of Primary Monomania (primäre Verrücktheit). By C. B. Burr, M. D., Assistant Physician to the Eastern Michigan Asylum, Pontiac. [Reprint from the "American Journal of the Medical Sciences."]

On Nasal Cough and the Existence of a Sensitive Reflex Area in the Nose. By John N. Mackenzie, M. D., of Baltimore, Md., Surgeon to the Baltimore Eye, Ear, and Throat Charity Hospital. [Reprint from the "American Journal of the Medical Sciences."]

The Bead Suture, etc. By David Prince, M. D., of Jacksonville, Ill. [Reprint from the "Annals of Anatomy and Surgery."]

A Rectal Obturator. By David Prince, M. D., Jacksonville, Ill. [Reprint from the "St. Louis Medical and Surgical Journal."]

Fourteenth Annual Announcement and Catalogue of the Woman's Medical College of Chicago. Session of 1883-'84.

Fifth Annual Announcement and Catalogue of the Medical Department of Arkansas Industrial University. Session of 1883-'84.

THE HYDROCEPHALIC CRY.—M. Darenberg lately related to the *Société de Biologie*, in Paris, a case in which the frightful cries of a patient with tubercular meningitis were stopped immediately, on three separate occasions, by a hypodermic injection of chloroform. Each time, as the cries ceased, a rhythmical spasm seized one of the patient's arms.

THE
NEW YORK MEDICAL JOURNAL,
A Weekly Review of Medicine.

Published by
D. APPLETON & Co.

Edited by
FRANK P. FOSTER, M. D.

NEW YORK, SATURDAY, JULY 28, 1883.

AUTHORITY IN MEDICINE.

IT is only with some qualification that it can be said, even at the present day, that there is no such thing as authority in medicine. It is true that none but the most hopelessly benighted have taken to their hearts a particular hero by whom they suffer themselves to be led, or whose dicta they bring up as a final argument in conversation; but it is none the less the case that there is still too great a disposition to trust to the judgment of authors. Of course, this is to a certain extent unavoidable, and will probably never cease to be so. Readers very properly require to know, for instance, whether, in the first place, an author is truthful and fair-minded, and, in addition, whether there is good reason for supposing him capable of guarding against ordinary sources of error in the observation of natural and pathological phenomena. In other words, they demand that what he sets down as facts shall be in some sort guaranteed to them to be facts. Apart from a personal knowledge of the man, such a guarantee is usually sought in the position accorded to the writer by those of his professional brethren who are so situated as to be able to bestow upon him the stamp of their esteem. Now, the latter generally takes the form of a college or hospital appointment. Hence it happens that very few men who are unable to write a title or two of that sort after their names make much of an impression on their readers.

It seems quite probable that professorships are sought for in view of this consideration quite as much as from a desire to get fees from students or consultation calls from junior practitioners; and hospital appointments rather for the same reason than from a wish to enlarge the field for personal study. This is neither unnatural nor reprehensible, for men are perfectly justified in clothing their utterances with all the weight that their personality is fairly entitled to carry with it. Perhaps, too, the inordinate multiplication of hospitals and medical colleges is in great degree attributable to the same impulse. This result is certainly to be regretted.

It is particularly of this country that we are speaking, for nowhere else do medical writers take such pains to have titles printed after their names. Indeed, our brethren on the Continent of Europe rather affect the opposite extreme. Not only do they leave us in the dark as to their official positions, but the town in which an author lives is not uncommonly omitted, a bare initial serves alone to distinguish one from another, and among the French it is often only the surname that is given. Now, this difference can scarcely be owing to any diversity of human nature, for it has not been generally noticed that our European *confrères* were any more given to self-depreciation

than ourselves. It must be simply that with them circumstances do not make it requisite that they should show their credentials whenever they choose to address their fellows.

There are several reasons why European writers do not need to introduce themselves to their readers, so to speak. To begin with, the mere fact of their membership in the profession is *prima facie* evidence that they are above suspicion, which, alas! can not be said of physicians in our own country, for here, besides the big hole for the old cat, there are little holes without number for the multitudes of kittens—in fact, what we are pleased to call the bulwarks of the profession is a mere basket-work—visible, but scarcely palpable. It may, indeed, be said with truth that this particular item in the count is being remedied steadily year after year; but we must not trust too much or too long to the operation of the natural causes that are conspiring to that end. Something definite ought to be done at once, and the signs of the times point to nothing so squarely as to the State examination for the degree.

But more operative, perhaps, than the status involved in the European license to practice is the fact that medical men of any noteworthy attainments in those countries soon become very well known to the great mass of the profession, while with us a man may be an admirable Crichton to his townsmen, and yet his name be entirely unknown beyond the narrow limits of a neighborhood. This diversity comes chiefly from the compactness of European countries, and the relatively small number of educational centers, together with the long period of time the student spends at those centers.

All these considerations, however, while they go far to account for the American demand that writers on medical subjects shall put forth some shadow of testimony to their fitness to be listened to, do not justify the approach that is very largely made to the days of old, when *Hippocrates dixit* was a conclusive argument. There is too little critical reading among us. An author's truthfulness and ability having been shown, a well-educated reader ought to be able—and not only able, but disposed—to gauge his writing at something very close to its real value. Yet the ease with which one man after another occupies the field, to the practical exclusion of lesser lights, goes to show that this is seldom done.

PERSONAL REPUTE IN THE PROFESSION.

IN the foregoing article some of the causes were mentioned which, it is thought, serve to hinder meritorious medical work from meeting with general and early recognition among the profession in this country. Among those causes was included the lack of acquaintance among physicians of various sections, the result of which is that really valuable contributions to our literature are apt to be lightly esteemed, or even wholly ignored, simply from the general craving for more authority than logic. To know a man personally is generally to estimate him aright. It is on all accounts to be desired, therefore, that men's qualifications should be given a fair chance to be made known to their fellows by personal acquaintance or something of an equivalent nature.

Our country is so large that we can scarcely expect that in this matter we shall ever reach the degree of organization and that extent of personal knowledge of each other that are enjoyed by the profession in smaller countries. Much can be done, however, to mend matters. Perhaps it is not altogether an advantage to our national societies in the specialties that their meetings are held in different parts of the country each year. Indeed, the American Gynecological Society seems to have come to that conclusion a few years ago, for it modified the plan somewhat, resolving to hold its subsequent meetings in a few of the large Eastern cities. The migratory feature is a gain to the members of these societies in one way, however, even if it gives rise to some falling off in the character of the scientific work they accomplish; for it brings them in contact with the general practitioners of various sections of the country, and makes them known in the most effective way.

Let one of these societies meet in a rural locality, for instance, and the meeting will be attended not alone by the members, but by the physicians of quite a large area. In a town of some magnitude, of course, the effect in that way is all the greater. Hence, what a man says at these meetings is not altogether buried in the volume of transactions or in the special journal that publishes the official report of the proceedings, although these publications circulate chiefly among men engaged in the same specialty. It is essential to the material success of a specialist that he should be known and esteemed by general practitioners as well as by his brother-specialists, and, when he addresses the profession at large through the medium of the general journals, it is well that his readers should have already had some idea of who he is.

Some of the shortcomings of the American Medical Association—and so large a body can scarcely be expected to be free from them—have been imputed, and no doubt with a great deal of truth, to its changing membership as concerns the delegates, and to its peripatetic character. These elements do unquestionably bring it about that the work done in its sections is inferior to that done by the special societies, but, on the other hand, these very features tend powerfully to make a different set of men acquainted with each other year after year. And those sets are numerous. Quite beyond its scientific work and its political work, therefore, the association is a power for good in the profession. We are not of those who decry the association, for, if in no other way it accomplished any good result, its influence in co-ordinating professional work and in promoting pleasant and profitable relations between men from different sections, engaged in various subdivisions of the general labor, is inestimable.

THE YEAST THEORY OF DIABETES.

THE minuteness with which Smollett traced "The Adventures of an Atom" may be said to have been quite outdone by ætiological research of late years. In the one case, that easy-going and accommodating nag, the imagination, needing neither whip nor spur, had only to be patted on the neck, and a consistent yarn was evolved for the reader's delectation. In the

other, facts, or what with more or less of reserve must be taken for facts, have had to be unearthed at great pains, submitted to all conceivable tests of their genuineness, and fitted together in such a manner as not to do violence to their natural relations. It is getting to be more and more uncommon for facts possessed of any special import to be stumbled upon, or even to be gathered in casually during a quest for those of other bearings; nuggets are not now picked up by the wayside, but hard quartz has to be crushed and forced, by dint of all the laborious processes known to man, to give up whatever may lie buried within it.

All this is only another way of saying that what we go on terming discoveries are constantly putting on more and more of the real nature of inventions. While the pursuit is thus made inexpressibly more tedious and wearisome, the advance made in the long run is more substantial, and greater satisfaction, if less glory, rewards the worker. The contrast is sharp between this state of things and that which obtained in Sydenham's time, for instance, when plausibility was the only passport needed for the doctrines of great men, and when those given out by men of less renown had but to run the gauntlet of criticism from rival theorists—a criticism that savored rather of a malicious animus than of any fair-minded devotion to the elucidation of nature.

But, notwithstanding the unquestioned fact that the great burden of modern progress is borne by the investigators, it happens now and then that they are found to have accumulated a mass of material that they have been unable to put to its full use, and some strong man with a gift for synthesis is needed to clear up the disorder. It seems as if the next great move in this direction would have to deal with the germ theory of disease; but the time has not yet come for this finishing touch to the natural history of the cryptogams. Whoever is to so conduct the game as to avoid a stalemate must have all the pieces well in view, and there must be no lingering doubt attaching to the rank or the relative position of any one of them.

If the yeast fungus is not then found to be a pawn masquerading in the semblance of a queen, abundant credit will fall to Dr. Eklund, whose ingenious exposition of the saccharomyces theory of diabetes is given in this number of the journal. Not the least taking feature of the theory is the explanation it offers of the acetonæmia of diabetes, assuming, of course, that diabetic coma really is due to acetonæmia. There are few diseases that are more puzzling than diabetes, whether in their pathogeny or in their clinical history, and whoever makes even a rational suggestion toward the solution of its mysteries deserves some mitigation of the stern hold by which modern science binds her devotees down to the study of pure facts.

PRECAUTIONS AGAINST THE CHOLERA.

Now, as always when the question arises as to the measures to be taken against an anticipated epidemic, the newspapers are dwelling on the matter of the filthy condition of the streets, and in this country and Great Britain the most prominent topic of inquiry in connection with the possible access of

cholera is as to what sanitary condition various places would be found to be in should the disease visit them. It is all very well to attend to cleanliness, not only when an epidemic threatens, but at all times. But it is sheer folly to bring that consideration into the foreground as being of the slightest avail under such circumstances as an impending invasion of cholera. Cholera undoubtedly runs riot in filth, but, unfortunately, it shows the same luxuriance in the cleanest of towns. The road to safety lies not in giving the disease a chilling reception on its arrival, but in not allowing it to arrive.

The deplorable feature in the tendency alluded to is the fact that it leads to neglect of the only measures that are of any real use. It even leads to depreciation of the value of quarantine measures. Public opinion, the utmost support of which is always needed in matters of sanitation, is thus lulled into indifference to the necessary restrictions on commerce, and fails to oppose the obstructiveness of trade. As the "Nation" lately remarked, quarantine may never yet have stopped the march of cholera. There is good reason to think, however, that it has. At all events, an extension of the quarantine idea is all we can depend upon to keep the disease at bay. It is, therefore, exceedingly satisfactory and reassuring to learn that our Government, at the suggestion of the Surgeon-General of the Marine-Hospital Service, has telegraphed instructions to our consuls at British ports to take measures for the sanitary inspection of vessels bound for this country. Over and over again have epidemics stolen a march on those who were busy in pooh-poohing the possibility of their arrival. While, then, as has before been stated in this journal, there is no present occasion for alarm, there is every occasion for vigilance.

MINOR PARAGRAPHS.

THE CHOLERA.

Up to the present time, Thursday, the cholera is not known to have crossed the Mediterranean, although there is a doubtful report that a few cases have occurred in Russia. Its ravages have increased in Egypt, however, and now cover a large extent of territory. Hundreds of its victims are dying daily in Cairo. Every European country, including Great Britain, which is said to be the only one not panic-stricken, is increasing its precautions against the importation of the disease. Spain has voted one million pesetas to defray the necessary expenses. The British Government has sent a corps of physicians to Egypt, and it is reported that a quarantine will be enforced at Dover and Leith. The action of our own Government, in regard to the inspection of vessels bound from British ports for this country, is recorded elsewhere. The Health Officer of the Port of New York is represented as being confident of his ability to prevent the infection passing his quarantine. The vessel which lately proceeded from the New York quarantine station to New Haven, laden with Egyptian rags, turns out to have left Egypt long before the outbreak of cholera took place, and it is thought she may be dismissed from consideration as a source of danger. As a general sanitary measure, the city of Chicago has added \$10,000 to its usual appropriation for the use of the Health Department.

In Egypt itself there are indications, at last, of the speedy enforcement of proper sanitary measures. The cordon around

Alexandria has been drawn closer, and hospital and ambulance facilities are being improved at Cairo. It has been decided that all refugees from Egypt must now undergo a sanitary inspection before being allowed to leave. A canal supplying a portion of Alexandria with drinking-water has been found to run through a cemetery, where corpses are washed in its waters.

It is reported that several of the European powers are negotiating for an international sanitary board, to sit either at Geneva or at Lugano, and a bill has been introduced into the French Chamber of Deputies appropriating 50,000f. for the expenses of the proposed scientific investigation of the Egyptian epidemic.

YELLOW FEVER.

THE recent rumor of an outbreak of the disease at New Orleans is denied officially. Various commercial bodies in that city have asked the Government to prohibit the entrance of vessels from infected ports into the waters of the State, and to forbid all communication between Ship Island and the coast. The State Department has directed our consul at Vera Cruz to advise commanders of vessels bound for American ports to call at Ship Island for inspection, to avoid being sent there by the health authorities of their ports of destination.

The steamship City of Washington, from Vera Cruz, arrived at this port on Wednesday, having called at Havana, where she landed passengers sick with yellow fever, and took other passengers on board. She is discharging her cargo at the quarantine station, and her passengers were to be allowed to come to the city on Thursday. The mail matter was taken off at once.

A death from yellow fever has taken place on board a British steamship in quarantine at Craney Island, near Norfolk, Va. In consequence, the Surgeon-General of the Marine-Hospital Service has directed that she be anchored farther away, and all foreign vessels entering the neighboring waters will be stopped and boarded by a health officer.

SERIOUS CHARGES AGAINST A PHYSICIAN.

THE "Tribune" publishes statements that, if true, bring to light certain practices on the part of Dr. W. F. Thoms, of Madison Street, going to show that he has been guilty of a series of questionable practices bordering on fraud. The charges are, in brief, that the doctor, representing himself as the president of a "Fresh Air Fund," makes appeals systematically, in person and by circular, to various citizens, and that contributions made in response to such appeals have been deposited to his own credit in a bank. It is stated, furthermore, that the circulars contain the names of gentlemen who say they have never heard of the scheme. The drift of the "Tribune's" article is, that Dr. Thoms's "Fresh Air Fund" is a myth, and that the doctor deliberately imposes upon the public. Dr. Thoms is well known in the profession, and we trust it will be shown that his vagaries have not been prompted by any intention to defraud those who have been annoyed with them.

ANATOMICAL DATA FOR THE ARMY MEDICAL CORPS.

IN a circular issued by the Surgeon-General of the army, for the information of the medical corps, the anatomical data formulated by Dr. Bowditch, of Boston, in a report presented before the Massachusetts Medico-Legal Society last year, are given, together with a modified form of Dr. Bowditch's scheme for recording post-mortem examinations. The latter embodies many useful hints for the conduct of autopsies. The circular contains also a table of the average weight and dimensions of the body as a whole, and of the various internal organs, at different ages,

abridged from tables compiled by Dr. Robert Boyd, of England; a table of the approximate volume of organs and the circumference of arteries, condensed from Beneke's "*Anatomischen Grundlagen der Constitutionsanomalien des Menschen*"; and a table giving statistics of stature and weight, mainly from Roberts's "*Manual of Anthropometry*" and Colonel Baxter's observations on nearly 140,000 American white males.

The document as a whole is a fresh exemplar of the gratifying spirit evinced by the Surgeon-General's office to promote creditable work by the medical corps.

THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION.

THE first number of this new weekly publication has reached us. It is dated July 14, 1883. It is largely taken up with the minutes of the meeting of the association. So far as we can judge from the first number, the journal will be a fitting representative of the association.

A MEDICAL PLEASURE PARTY.

SOME of our Philadelphia brethren, including Dr. W. M. Welch, Dr. C. J. B. Nancrede, Dr. Forbes, of the Jefferson Medical College, Dr. J. V. Shoemaker, and Dr. Carl Seiler, lately made up a party to go to the town of Cresson in quest of recreation. The occasion was a meeting of the Juniata Valley Medical Society at Cresson. Dr. Shoemaker had charge of the arrangements, which fact is an ample assurance that the party was handsomely provided for.

THE IOWA STATE MEDICAL REPORTER.

THIS is the title of a sixteen-page monthly journal, edited by Dr. F. E. Cruttenden, Dr. C. M. Hobby, Dr. L. C. Swift, Dr. D. W. Smouse, and Dr. J. T. Priestley, and published at Des Moines. The first number, for July, contains three original articles, several clinical contributions, and a variety of editorial matter. The "Reporter" is "edited expressly for the medical profession of Iowa."

A CLINICAL ALBUM OF DERMATOLOGY.

UNDER the title of "*Album Clínico de Dermatología*," the enterprising conductors of the "*Revista de Medicina y Cirugía Prácticas*," of Madrid, have begun the publication of an illustrated periodical devoted to dermatology. The third number, now before us, contains an excellent picture portraying the affection termed *tiña pelada* (alopecia areata). A brief description of the case is appended, in which the author, Dr. Perez Ortiz, mentions that he found the *Microsporon Audouini*, which fact, taken in connection with the title he applies to the affection, seems to show his acceptance of the parasitic theory of its ætiology.

THE BRISTOL MEDICO-CHIRURGICAL JOURNAL.

THIS is a new journal, published (semi-annually at present) under the auspices of the Bristol Medico-Chirurgical Society. The first number, for July, 1883, contains 142 handsome octavo pages, and is quite freely illustrated. The original papers are: The Proofs of the Existence of a Phthisical Contagion, by R. Shingleton Smith, M. D., etc.; Clinical Evidence against the Contagiousness of Phthisis, by E. Markham Skerritt, M. D., etc.; The Cardiograph in Medicine, by G. Munro Smith, L. R. C. P., etc.; and Surgical Out-Patient Notes, by W. H. Harsant, F. R. C. S. These are followed by a goodly array of "clinical

records," book notices, and abstracts. We congratulate the editor, Mr. J. Greig Smith, on the promising start the new journal seems to have made.

THE MORTALITY AMONG CONVICTS.

SOME statistics have recently been published giving the death rate in the principal penitentiaries or state prisons of the various States, and the comparison is curious and to a degree inexplicable. The proportion varies from three in every thousand in Wisconsin to seventy-seven in Mississippi. Of the prisons of this State, the rate at Sing Sing is a little less than seven, at Auburn twelve, and at Clinton over twenty. In Massachusetts the rate is fifteen, in Maine the same, in Vermont twenty-five, and in Connecticut fifteen. In Pennsylvania, the rate is six in the Western Penitentiary and fourteen in the Eastern. It has been the custom in some of the Southern States to let out convict labor to the highest bidder, and this has resulted in a frightful death rate, although the figures are not easily ascertainable.

The highest rate in a northern State is twenty-six, in New Hampshire. These variations are so remarkable that there does not seem to be any comment possible. In some of the institutions presumed to be the best managed, the death rate is exceedingly high, while in others of apparently equal grade it is low.

NEWS ITEMS.

THE NUISANCES AT HUNTER'S POINT.—At last, it seems that an effort now being made to abate the nuisances on Newtown Creek is likely to succeed, the State Board of Health having taken the matter up, after the failure of the New York and Brooklyn boards. Thirty-two establishments have been shown to be nuisances, and, unless some miscarriage of justice takes place, they must be abandoned or the character of their operation must be radically changed.

AN OUTBREAK OF DISEASE AMONG HORSES, the precise nature of which is not yet apparent, is reported from Connecticut. Three horses on a farm in West Hartford, all there were on the place, were suddenly attacked, and died within a few hours. A veterinarian, Dr. Bryden, made an autopsy in one of the cases, and is said to have found that pneumonia was the cause of death.

A DEATH FROM "SOOTHING SYRUP" having occurred in Brooklyn, the coroner's jury have very sensibly recommended the passage of a law by the Legislature forbidding the sale of such preparations except on physicians' prescriptions.

AMERICAN PORK IN SPAIN.—It appears that the Spanish Government, more just and discriminating than some of its neighbors, has not prohibited the importation of pork from this country, but has simply taken proper measures to prevent the entrance of diseased pork.

LEPROSY IN EGYPT.—In addition to the cholera, leprosy is said to have become very prevalent of late in the neighborhood of Damietta.

THE TRAINING OF NURSES IN PENNSYLVANIA.—At the recent meeting of the Medical Society of the County of Allegheny, Pa., a committee was appointed to report a plan for the efficient training of nurses in the county.

THE MASSACHUSETTS STATE BOARD OF HEALTH, LUNACY, AND CHARITY.—Dr. Edgar A. Dean, of Brockton, has been made a member of the board.

CHOLERA MORBUS IN CONNECTICUT.—Two fatal cases having occurred in Hartford last week, together with a number of

others nearly as severe, some alarm was felt lest the outbreak might be one of Asiatic cholera, but this feeling has been allayed by judicious statements made public by the secretary of the State Board of Health, Dr. C. W. Chamberlain.

THE SUMMER SANITARY CORPS OF THE BOARD OF HEALTH.—The vacancy occasioned by the death of Dr. Milligan Patchin has been filled by the appointment of Dr. E. E. Hunt.

THE REGISTRATION OF DEATHS IN BROOKLYN.—On Tuesday a physician was arrested on a charge of failing to report the death of an infant to the Board of Health.

PROFESSOR O. C. MARSH, of Yale College, has been made a member of the Munich Academy of Sciences.

DR. KIDD, of DUBLIN, the well-known obstetrician and gynecologist, has received the degree of *Magister in Arte Obstetricia* (M. A. O.) from the University of Dublin.

M. DUJARDIN-BEAUMETZ has been made an officer of the *Légion d'honneur*.

OBITUARY NOTES.

MILLIGAN PATCHIN, M. D.—On Sunday, the 21st inst., Dr. Milligan Patchin, a young physician of quite unusual promise, died suddenly, under peculiarly painful circumstances. Dr. Patchin, who was living with friends, at No. 427 East Fiftieth Street, in New York City, a few minutes after retiring to his room at about half-past nine in the evening was found in a moribund condition, having been wounded by a pistol-ball which passed through the heart and a portion of the left lung. The lady with whom he was living had spoken to him at the door of his room at about half-past nine, and had noticed nothing unusual. A few minutes later, hearing a heavy fall, she entered the room, and found Dr. Patchin in a dying condition, lying upon the floor, and wounded as described. The first impression made upon the mind of herself and other friends was, that Dr. Patchin had committed suicide; although it was the mode of death only that gave color to this supposition, there being no imaginable cause for an act of self-destruction. Careful examination, however, at the inquest, showed clearly that the discharge of the pistol must have been accidental. There was no discoloration of the clothing from burning powder, and the discharge must have taken place at some distance from the body. This, with other circumstances developed at the inquest, left no doubt with regard to the accidental character of the injury, relieving the friends from the additional distress which would have attended a death from suicide.

Dr. Patchin was born in Buffalo, New York, December 16, 1860, and was, therefore, in the twenty-third year of his age. Between the ages of nine and fifteen he was at school in South Germany. He afterward spent nine months at school near Paris, and became a complete master of the German and French languages. From the age of sixteen to nineteen he studied under a tutor near the Eton school in England. Returning to the United States, he passed his entrance examination for Columbia College, but never joined his class. For several years he had shown a decided taste for the study of medicine, which was not encouraged by his relatives, on the ground that his health, although not feeble, was, at that time, far from robust.

In 1880 Dr. Patchin began the study of medicine at the Bellevue Hospital Medical College, graduating in the spring of 1883. During this time he was a close and enthusiastic student, spending two of his summer vacations in desultory work at different hospitals in England. At his final examinations he presented himself as a competitor for one of the four places at

the disposal of the college, as interne in the Bellevue Hospital. In this competition he was successful, ranking number two on the list, and receiving a total mark of thirty-four out of a possible thirty-five. In order to go upon the medical service in the hospital, which he preferred to the surgical service, he exchanged with the successful candidate next below him in rank, and would have entered the hospital in October of the present year. On July 9th he was appointed one of the temporary assistant sanitary inspectors under the Board of Health, and was serving in this department at the time of his death.

It is evident, from this account, that it is no empty tribute to the memory of Dr. Patchin to say that he was a gentleman of unusual attainments in his profession. He was peculiarly gentle and modest in his character and manner, a quality which endeared him to his teachers and fellow-students. The moment he began the study of medicine he seemed to have entered upon his true vocation in life; and his chief pleasure was in his professional work and associations. His hospital appointment and many little successful achievements which he made in practice after his graduation were sources to him of much unobtrusive pride and gratification. Few young men have entered the profession with more flattering prospects; and his untimely death will be much regretted by all who remember the persevering, gentle, and unassuming student, just entering upon what promised to be a bright and useful professional life.—A. F., JR.

W. B. RINZER, M. D., OF CLEVELAND.—Dr. Rinzer died suddenly on Saturday, the 21st inst. He was the president of the Cleveland Microscopical Society.

GEORGE W. FISHER, M. D., OF BALTIMORE.—Dr. Fisher's death is announced in a brief dispatch to the newspapers. He was a son of Dr. George J. Fisher, of Sing Sing, New York.

Proceedings of Societies.

AMERICAN OPHTHALMOLOGICAL SOCIETY.

THE nineteenth annual meeting was held at the Hotel Kaaterskill, Catskill Mountains, N. Y., July 18 and 19, 1883.

First Day, Wednesday, July 18th.—Morning Session.

The meeting was called to order at 10 A. M. by the President, Dr. HENRY D. NOYES, of New York, who made a few congratulatory remarks, and then appointed the following

COMMITTEES.—*Committee on Bulletin*: Dr. F. B. LORING, of Washington, and Dr. E. W. BARTLETT, of Milwaukee. *Business Committee*: Dr. JOHN GREEN, of St. Louis, Dr. E. GRUENING, of New York, Dr. O. F. WADSWORTH, of Boston, Dr. S. THEOBALD, of Baltimore, and Dr. E. DYER, of Newport.

THE TREASURER'S REPORT was read and, after being audited, adopted.

NOMINATIONS FOR MEMBERSHIP.—Dr. CHARLES S. TURNBULL, of Philadelphia, Dr. MILES STANDISH, of Boston, Dr. J. L. THOMPSON, of Indianapolis, Dr. W. T. BACON, of Hartford, Dr. STEPHEN O. RITCHIE, of Washington, and Dr. JOHN VAN DUYN, of Syracuse, were nominated.

NEW MEMBERS.—Dr. B. E. FRYER, U. S. Army, Fort Leavenworth, Kan., Dr. J. A. ANDREWS, Clifton, N. Y., Dr. L. WEBSTER FOX, of Philadelphia, Dr. J. A. LIPPINCOTT, of Pittsburg, Dr. J. L. MINOR, of New York, and Dr. E. E. HOLT, of Portland, Me., were elected to membership.

INVITED GUESTS.—Dr. T. Y. SUTPHEN, of Newark, N. J., Dr. R. H. JOHNSON, of Philadelphia, Dr. MILES STANDISH, of Boston, and Dr. SWANN M. BURNETT, of Washington, were invited to attend the sessions.

THE RESIGNATION OF Dr. THOMAS J. MORTON, of Philadelphia, was presented and accepted.

THE INFLUENCE OF COLLEGE LIFE ON REFRACTION.—A paper on this subject, by Dr. HASKET DERBY, of Boston, was read by Dr. Miles Standish, of Boston. In two hundred and fifty-four instances the author had been able to trace the refraction through the whole term of four years. The examinations were all personally conducted with glasses, and in the majority of cases, certainly in all doubtful ones, with the ophthalmoscope. The results given were obtained with glasses. The use of atropine had been entirely impracticable, as the students could not have been allowed, even temporarily, to be disabled from the active prosecution of their studies. Dr. Derby recorded degrees of ametropia as slight as 0.5° , but nothing less. The average age of those examined was: at entrance, nineteen years; at graduation, twenty-three. The number of cases was small, it was true, but this was one of the few attempts yet made to trace the movement of refraction among the more highly educated during this particular period of life, and for a continuous term of years. The general results were: Hypermetropia, at entrance, thirty-nine; at graduation, forty-seven; myopia, at entrance, ninety; at graduation, one hundred and twenty; emmetropia, at entrance, one hundred and twenty-five; at graduation, eighty-seven. He found under the head of manifest *hypermetropia*, of which there were thirty-nine cases at entrance, that one changed to myopia, two diminished, twenty-seven remained stationary, and nine increased. Of *myopia* there were ninety cases; thirty-two remained stationary, and fifty-eight increased. *Emmetropia*: The observations concerning this class possessed peculiar interest, the results somewhat militating against theories generally accepted. One hundred and twenty-five persons were emmetropic at the time of entrance. Of these, eighty-six remained emmetropic, while ten became hypermetropic, and twenty-nine myopic. The average age of the latter was very nearly nineteen at entrance, twenty-three at graduation. The average myopia developed amounted to nearly 1° (0.982). So far as these figures went, they tended to show, first, a large amount of myopia, even in this country, among the educated classes. It was difficult to compare Dr. Loring's figures with these, because Dr. Loring's statistics were based on observations made between the ages of six and twenty-one, whereas these observations were made between the ages of eighteen and twenty-three. But all researches at the latter age went to prove that at least half, or very nearly half, the educated community were myopic, in this as well as in other countries. Moreover, contrary to the impressions so long entertained, myopia might be acquired at or near twenty years, from the same causes that produced it at an earlier age, and it might progress until the course was completed.

The paper was discussed by Dr. DAVID WEBSTER, Dr. W. F. MITTENDORF, and Dr. E. GRUENING, of New York (the latter calling special attention to the use of the term dioptric, urging that some uniform mode of spelling be adopted), Dr. W. H. CARMALT, of New Haven, Dr. LITTLE, of Philadelphia, and Dr. HUTCHINSON, of Utica.

SOME IMPROVEMENTS IN INSTRUMENTS AND APPLIANCES FOR CATARACT OPERATIONS.—Dr. RUSSELL MURDOCH, of Baltimore, read a paper with this title. He exhibited an ophthalmostat, or a self-holding eye forceps, and an eye speculum, which were modified from those exhibited to the society in 1874. The distinguishing features of the speculum were "absence of spring and set-screw." The change in the ophthalmostat was such that it seized the conjunctiva in a vertical fold, rotating the eye-

ball without dragging it, and three little hooks were substituted for one pair, which secured greater steadiness. The new instruments consisted, first, in the combination of Graefe's knife, end to end, with de Wecker's scissors; second, a combination of iris forceps with the cystotome and shell-spoon. The advantages stated for these instruments were that an assistant was dispensed with, and that seven instruments were reduced to three for the modified linear extraction of cataract. Dr. Murdoch also exhibited a bandage which could be quickly made and easily applied.

Dr. GRUENING, of New York, thought that outside of the limits of civilization such complicated instruments might be useful, but that within those limits they should be discarded entirely, and that a cataract operation should not be undertaken without an assistant. Concerning the bandage, he thought an ordinary flannel bandage could not be replaced by anything yet brought forward. No bandage could produce the pressure that could be got from the flannel roller. It was necessary to immobilize the eye, and this could not be done by any substitute for the ordinary flannel bandage.

The PRESIDENT remarked that he had had some experience in the use of the little forceps in fixation, and had long ago discarded the instrument because it did not give so much control over the eye as one might imagine. He had concluded that the operator's hand should guide the forceps.

Dr. MURDOCH was well aware the gentlemen in New York could obtain an assistant at any time, but he thought there were occasions elsewhere when it was impossible to secure one, and the instrument had been devised especially to meet such emergencies.

Dr. THEOBALD, of Baltimore, believed that the eye could not be immobilized by any bandage whatever which was at all permissible, and that there was a decided objection to the long flannel bandage, especially during hot weather.

Dr. GRUENING would not insist upon the flannel bandage, but he would insist upon the long bandage, and of late he had used gauze wet with water. He believed that the eye could be immobilized perfectly if the bandage were properly applied. The first thing was, to fill up the orbital depression so that when the hand was placed over it the brow and the bridge of the nose were not felt, but the hand rested entirely upon the pad, and, upon such a pad, pressure with the bandage could be made to render the eye quite immobile.

Dr. THEOBALD thought if Dr. Gruening would apply the bandage, in the manner described, to his own eye he would find that the eyeball had not been rendered immobile.

TUBERCLE OF THE IRIS.—Dr. HENRY S. SCHELL, of Philadelphia, reported the case of a boy, nine years of age, who applied for treatment at the Will's Eye Hospital, August 29, 1881. The left eye had been painful for four days, and showed the general signs of ordinary plastic iritis. Atropine and mercurial ointment were prescribed. On the 16th of September no effect had been produced. In the latter part of October the boy came to the Children's Hospital, with well-marked coxalgia in the second stage. There was a distinct history of phthisis on the mother's side. The left eye was still somewhat painful, the pupil was immobile, there was a ring of circumscribed injection, and projecting from the nasal side of the pupillary margin was a small, yellowish-white nodule of the size of a pin's head and tinged with pink. This gradually increased in size. The hip-joint disease progressed. The eye was enucleated, and was examined by Dr. G. B. Lawrason, of New Orleans, who reported that it consisted of two or three tubercular masses imbedded in inflammatory product. The tubercles seemed to have developed in the organized inflammatory product, which nearly filled the anterior and posterior chambers.

The PRESIDENT said that within the last year a case had been under observation in New York which illustrated the difficulties in diagnosis. The patient was four years of age, and the gross appearances presented by the eye were absolutely indistinguishable from a glaucomatous condition or a metastatic choroiditis. The patient continued under observation for several weeks without much progress in the disease. The eye was then enucleated, and the disease was found to be tubercular. It was felt at the time, by those who examined the patient, that, in some cases, the differential diagnosis between glaucoma and tubercular disease was impossible.

TUBERCULOSIS OF THE CILIARY MUSCLE AND IHS.—Dr. O. F. WADSWORTH, of Boston, reported a case occurring in a girl three years and a half old. Dr. Hasket Derby, of Boston, had seen the patient when the process had lasted two weeks, and regarded the case as one of kerato-iritis. The pupil contracted, and remained so in spite of atropine. The cornea was hazy. The lids were natural. Afterward, when Dr. Wadsworth saw the patient, the cornea was hazy, the conjunctiva was moderately congested, there was no marked ciliary congestion, there was a good anterior chamber, and the pupil was of good size. The patient died about six months afterward. The eye after it was removed contained a mass about six millimetres in thickness, the vitreous was replaced by serous fluid, and there was nothing of the lens to be seen. The iris and choroid were in place, and behind the mass. Microscopical examination, made by Dr. Ernst, of Boston, showed that the growth was tubercular, and contained bacilli.

The paper was discussed by Dr. PROUT, of Brooklyn, and Dr. WEBSTER, of New York.

A PERSONAL EXPERIENCE WITH PRISMATIC GLASSES.—Dr. S. F. McFARLAND, of Oxford, N. Y., read a paper in which he stated that during his boyhood he had a slight divergence, occurring and disappearing at times, although seldom sufficient to attract attention. Still, he had the full use of his eyes, could judge of distances as well as others, and was even expert in sports requiring binocular vision. He had no inconvenience during his studies, always enjoying the greatest comfort during the most severe and protracted application. During the autumn of 1862 he contracted typho-malarial fever in the army, and after recovering found that he had lost the full and comfortable use of his eyes, but felt the usual pain and annoyance attending a futile effort to use both eyes in conjunction, so that he was compelled finally to discontinue reading almost entirely, until, in January, 1866, he consulted Dr. Noyes, who gave him plain prisms of 7° each, bases inward, for distance, and 8° each, with + 36 spherical for reading. At that time he had been nearly three years unable to obtain binocular vision even for a moment, but at once he was able to see distinctly. He had never discontinued their use. They had been varied from time to time, but he had always adhered to the prisms. He could not maintain continued binocular vision, but could obtain and retain it long enough for an iridectomy, or the extraction of a cataract, or even a very protracted operation, although with pain and very distressing lassitude afterward. Without the prisms he could not do these things, inasmuch as slight differences in distance would not be appreciable. With bifocal sphero-prismatic glasses he was able to do all his office work without changing, and with a reasonable amount of comfort.

THE APPARENT CURVATURE OF SURFACE PRODUCED BY PRISMS.—Dr. O. F. WADSWORTH, of Boston, read a paper in which he remarked that the phenomenon was very familiar that when we looked through prisms with a plane surface, with the bases inward, the surface appeared convex, and with the bases outward it appeared concave. He had not met with any exception, and the communication was intended to explain it, and was the

theory which had been worked out by Dr. Pierce. It was illustrated with diagrams.

TUBERCLE OF THE CHOROID.—By invitation, Dr. S. W. BURNETT, of Washington, presented a specimen, accompanied with the history of the case.

SYMPATHETIC NEURO-RETINITIS.—Dr. J. A. SPAULDING, of Portland, Me., read a paper, in which he reported a case. He first referred to the works of Mauthner and Knies, whose views were so diametrically opposed, the latter believing that the so-called cases of sympathetic neuro-retinitis were open to criticism. It seemed desirable, therefore, to publish and thus to offer to careful criticism every case of apparent sympathetic inflammation of the retina and optic nerve (either alone or conjoined). And above all did this appear necessary when we had, as at present, to offer one in which, so far as accurate and repeated examinations had revealed, the retina and optic papilla of one eye underwent inflammation after an injury to its mate, while at no time were there ever any visible signs of inflammation of any portion of the uveal tract. The patient was a Danish woman, fifty-six years of age, healthy in every respect. On the 6th of January, 1883, she was struck in the eye by the horn of a cow, which rendered her at once and for ever totally blind in that eye. The patient saw a flash of light, and then the sight was gone. Seven weeks after the injury to the right eye, the patient, much reduced in health by the pain and irritation in the right eye and its neighborhood, came to Dr. Spaulding. On the 30th of March, about four weeks after she was first seen, the right eye was enucleated. The case progressed favorably, and the patient was sent home. No medical treatment was adopted. The result appeared to justify the idea of the truly sympathetic nature of the neuro-retinitis in the left eye, for the sight gradually returned to the remaining eye. Pain in the head disappeared with considerable rapidity. July 14, 1883, examination with the ophthalmoscope revealed the left eye normal, vision $\frac{20}{20}$. The presence of neuro-retinitis with total loss of vision in the eye five weeks after an injury to the other, and without any other visible or possible cause, indicated the sympathetic nature of the disease. Iritis in any form was excluded as the possible cause of the difficulty in the left eye. The removal of the eye was accompanied by troublesome hæmorrhage, for which two vessels had to be tied. A discussion followed on the management of hæmorrhage in such cases, Dr. WEBSTER, Dr. PROUT, Dr. MITTENDORF, Dr. WILLIAMS, Dr. DYER, Dr. GREEN, Dr. KNAPP, and the PRESIDENT taking part.

The paper was further discussed by Dr. W. W. SEELY, of Cincinnati, and Dr. F. BULLER, of Montreal, Canada.

THIRTY-FIVE CASES OF CATARACT EXTRACTION were reported by Dr. WEBSTER. All the operations had been performed at the Manhattan Eye and Ear Hospital. A brief clinical history of several of the most interesting cases was given.

The paper was discussed by Dr. HEYL and Dr. STRAWBRIDGE, of Philadelphia, Dr. THEOBALD, of Baltimore, and Dr. CARMALT, of New Haven.

NOTES ON OCULAR THERAPEUTICS.—Dr. W. W. SEELY, of Cincinnati, read a paper in which he directed attention, first, to the use of yellow oxide of mercury in external ocular troubles. Ten grains to the ounce of the vehicle was the best for all purposes. The less bichloride the preparation contained, the less pain it caused in conjunctival affections. Where there was profusion of tears, such as to wash a salve out, it was well to substitute eserine or the bichloride in solution, to contract the blood-vessels. The strength of the bichloride solution that seems to answer every purpose was one grain to sixteen ounces of water. The application was entirely painless, and had often, in his hands, subdued a violent acute catarrhal conjunctivitis, after from one to three or four thorough drenchings of the conjunctiva. In cor-

neal affections he used a four-grain solution of eserine once a day, and believed that it acted altogether better than more frequent applications, either of the same or of a weaker solution. This remark applied to all classes of cases. For the reduction of intra-ocular tension, eserine had with him done away entirely with paracentesis. Every one had met with cases of iritis in which atropine did not act promptly and satisfactorily, possibly because of the extreme vascularity of the iris. In such cases, instead of doing a paracentesis, and extracting blood, he instilled once a day a few drops of a four-grain solution of eserine. The habit of instilling eserine once a day in iritic cases had become a routine practice with him, the patient at the same time using the mydriatic in the ordinary manner. In more than one case had he seen adhesions yield to the combined use of a myotic and a mydriatic, that had resisted the latter alone. Iritis was the only disease in which he employed a mydriatic as a fundamental remedy. Eserine was the remedy *par excellence* in corneal affections. In cases in which mydriasis was necessary it could be produced perfectly, and still the satisfactory effects of the myotic be maintained.

Dr. McKAY had used yellow oxide of mercury with very favorable results in conjunctival troubles.

Dr. GRUENING said the alternate use of mydriatics and myotics for breaking up adhesions was not entirely new. He had resorted to it as long ago as 1868. He regarded the use of eserine in iritis as an extremely dangerous practice.

Dr. KNAPP thought the alternate use of eserine and atropine was advantageous in some forms of iritis, especially the serous variety. Again, where there was increase of pressure, which produced intense pain, as in certain cases of glaucoma, the pain was considerably relieved by eserine. In serous iritis the pressure was sometimes intense, and he thought that eserine could be so regulated as to prevent the noxious effects of the drug.

Dr. SEELY said he did not speak of the alternate use of eserine and atropine, but wished simply to speak of the use of eserine once a day for the purpose of contracting the blood-vessels, of course maintaining mydriasis with atropine. He had never seen a case in which eserine had produced iritis.

The paper was further discussed by Dr. KIPP, of Newark, Dr. KNAPP, and Dr. McKAY.

Evening Session.

THE TREATMENT OF DETACHMENT OF THE RETINA.—Dr. W. F. MITTENDORF, of New York, read a paper on this subject. During the last three years he had treated several very extensive detachments of the retina in patients that had only one useful eye. Although no new remedy or new method had been used, it was the combination of the different plans devised for the treatment of this affection, and the mode of administering the remedies, that had led to success. After briefly referring to the causes of detachment of the retina, the writer stated that the object of treatment must be: 1. To keep the eye as free as possible from all irritating influences, which was best done by closing both eyes, or by putting the patient into a dark room. 2. To keep the eye as quiet as possible, avoiding all accommodative efforts, and for this purpose the eye must be kept under the influence of a mydriatic. 3. To place the absorbents in the most favorable condition by means of a pressure bandage, and he had found elastic pressure with a rubber bandage of the greatest assistance. 4. To hasten the absorption of the effused fluid, if this were the cause of the detachment, by the use of jaborandi or pilocarpine. He had given a hypodermic injection of one fourth to one sixth of a grain of pilocarpine early in the morning, and then kept up the diaphoresis by the use of an infusion of jaborandi leaves, from forty grains to one drachm in twelve ounces of water, administered in wineglass-

ful doses during the afternoon and evening. This treatment should be kept up for three or four weeks. He had not seen a single case in which the remedy administered in this way had to be discontinued on account of unpleasant symptoms. If the detachment complicated a specific choroiditis, or if it followed a serous iritis demanding specific treatment, this could be used at the same time with the other remedies mentioned. In these cases the disease yielded, as a rule, sooner than in others, and it was not necessary to push the pilocarpine to so great an extent. Dr. Mittendorf then reported in detail three cases, all of which had been successfully treated. They tended to show: 1. That in marked detachment of the retina the energetic use of jaborandi and pilocarpine would do good, especially if the patient could be kept under the influence of the drug during the entire day, and for a period ranging from twenty to thirty days. 2. That the elastic bandage must be used at the same time. 3. That the patients must be kept upon the back for most of the time. 4. That the use of atropine, which caused no inconvenience, should likewise not be neglected.

The paper was discussed by Dr. GRUENING, Dr. LITTLE, Dr. ANDREWS, Dr. WEBSTER, Dr. THEOBALD, and Dr. SPAULDING, the latter speaking of operative treatment. He referred to a suggestion made by Mooren, that an attempt be made to remove the effusion with the hypodermic syringe. Having a case, he tried the operation. Although he succeeded in removing a considerable quantity of the subretinal effusion, there was not much improvement, except temporarily. He suggested that the method might be improved by placing a piece of rubber tubing between the needle and the tip of the nozzle, thus making an instrument somewhat similar to that used in the treatment of soft cataract. At least he thought that some form of aspiration might be made applicable in these cases.

TWO CASES OF CONGENITAL ECTOPIA LENTIS; ONE SYMMETRICAL, THE OTHER NON-SYMMETRICAL.—These cases were reported by Dr. WILLIAM S. LITTLE, of Philadelphia.

THE EMPLOYMENT OF NITROUS OXIDE AS AN ANÆSTHETIC IN OPHTHALMIC OPERATIONS.—Dr. GEORGE T. STEVENS, of New York, read a paper in which he stated that he had employed it in operations about the nasal duct, iridectomy, cystotomy, and similar short operations, and believed that it possessed several advantages, such as being less dangerous, unattended with nausea and other manifestations incident to the use of ether, and that it demanded for its administration far less trouble than ether or chloroform. He thought it doubtful if it could be relied upon for cataract operations.

The PRESIDENT had employed it, more or less, during the last ten years, and stated that the oxide had the advantages claimed for it to a certain extent. He had, however, noticed two features: 1. There was apt to be a good deal of rigidity on the part of the patient in some cases. 2. It was apt to be attended with a great deal of venous congestion, which gave rise to considerable hemorrhage in wounds about the eye.

Dr. R. H. DERBY, of New York, had employed the nitrous oxide preliminary to prolonged anaesthesia with ether, and with very gratifying results.

Dr. BULLER, of Montreal, said that for some time nitrous oxide had been used in the hospitals in London, but with unsatisfactory results. He had resorted to the primary anaesthesia produced by ether with exceedingly gratifying results.

A CONTRIBUTION TO THE OPERATIVE TREATMENT OF GLAUCOMA.—Dr. ALBERT G. HEYL, of Philadelphia, read a paper with this title. After giving the ordinary method of treatment, and detailing the history of a case in which he had resorted to operative treatment, he recommended the following plan as a modification of that which he had employed. It was to ligate the frontal artery and open the supra-orbital artery, allowing a

few ounces of blood to escape, and then close the vessel with a ligature.

Dr. WEBSTER recalled a case in which a California surgeon advocated early ligature of the carotid for glaucoma, performed the operation once, and cured his patient.

The PRESIDENT stated that the natural history of acute glaucoma must be considered before deciding with reference to the influence produced by any modification of the circulation by operation.

Dr. SEELY, of Cincinnati, said it should be borne in mind that the influence of the Californian operation was directly the reverse of that suggested by Dr. Heyl.

THE ASTIGMATIC PENCIL.—Dr. GUSTAVUS HAY, of Boston, read a communication on this subject. It was discussed by Dr. KNAPP.

SARCOMA OF THE CHOROID, WITH INTERESTING CLINICAL FEATURES.—Dr. CHARLES J. KIPP, of Newark, N. J., reported some cases.

OSSIFICATION OF THE CHOROID.—Dr. KIPP also read a paper describing a case of very extensive ossification of the choroid occurring in a young man who, when first seen ten years ago, had a chalky cataract, to which the pupil was everywhere adherent. As there were at that time no symptoms of irritation of the eye, and the case was hopeless so far as sight was concerned, no treatment was advised. The boy had been born with the cataract, according to the mother's statement. Ten years afterward the eye became painful, and presented the appearance of irido-cyclitis. The eye was removed, and, on examination, the osseous plate lined the inner side of the choroid as far as the ciliary processes.

The communication was discussed by Dr. HOWE, of Buffalo, who presented a specimen, by the PRESIDENT, by Dr. MITTENDORF, and by Dr. WEBSTER.

TRITURATION OF THE CORTEX OF CATARACT.—Dr. S. THEOBALD, of Baltimore, read a paper in which he reported two cases of this operation, in connection with preliminary iridectomy, to hasten the development of slowly ripening cataracts. The operation consisted in a kneading, or bruising, of the anterior cortical layers of the lens by pressure on the cornea after iridectomy and while the anterior chamber was still empty, in accordance with the suggestion put forth by Professor Förster, of Breslau. The trituration was done with the angle of the strabismus-hook, and in the first was imperfectly performed. In the second case the operation was performed with the smooth end of the Bowman tortoise-shell cataract-spoon, which seemed better adapted to the purpose. In the first the operation was followed by but slight change in the condition of the lens. In the second case, however, a very rapid development of the cataract ensued. In each case there occurred a sufficient amount of iritis to cause slight but persistent adhesions between the iris and lens at the pupillary angle of the coloboma, and in the second case it was found, by oblique examination, a day or two after the operation, that near the cut edges of the iris the pigment layer had been detached from the muscular coat in a manner quite peculiar. That the iris would be more or less bruised as well as the lens, however carefully the trituration was performed, appeared unavoidable, and the risk of exciting inflammation in this manner seemed the chief objection to the procedure. It would appear, however, that Professor Förster had not had serious trouble from this source.

Dr. GRUENING had performed the operation twice during the last year. In the first he performed a large iridectomy upward, and with the angle of the strabismus-hook treated the lens in the area of the pupil only. No iritis followed, and the lens became completely opaque within one week. He extracted it three weeks latter with very good results. In the second case

he performed iridectomy upward, and again treated the lens only in the area of the pupil, and in four days the lens was completely opaque. He thought there were certain cases in which the operation was indicated, and was attended with great gain.

Dr. KIPP had performed the operation some time ago; the lens became opaque, and four or five days afterward it cleared up again.

Dr. MITTENDORF thought the operation was indicated, especially in certain cases in which two cataracts were formed. His experience had been equally favorable with Dr. Gruening's.

Dr. KNAPP had performed the operation once, but it did not seem to hasten the ripening of the cataract.

Dr. WADSWORTH had operated once, eight years ago. There seemed to be no effect at all so far as ripening of the cataract was concerned. He thought that probably, in some cases, maturity of the cataract might be hastened very much by the method, while in other cases the result would be very slight.

The PRESIDENT had operated eight times, and in seven cases had subsequently performed extraction. In one case marked iritis developed, but did not interfere with the subsequent recovery, and extraction was entirely satisfactory. He hoped to make a communication upon the subject which would embrace the history of all his cases, with remarks.

Dr. GRUENING remarked that by the area of the pupil he meant the new pupil, including the coloboma.

The paper was further discussed by Dr. WEBSTER, Dr. FOX, Dr. DYER, and Dr. THEOBALD.

Second Day.—Thursday, July 19th.

The society was called to order at 9 A. M. by the President.

The treasurer moved that the annual assessment be five dollars. Adopted.

VASELINE CERATE, A CONVENIENT BASIS FOR OINTMENTS INTENDED FOR APPLICATIONS TO THE EYELIDS.—Dr. THEOBALD, of Baltimore, read a brief paper on this subject, in which he stated that he had been using a cerate made of yellow wax and vaseline, with much satisfaction, for several months, both in private and in hospital practice, as a basis for ointments intended for application to the eyelids. It was made by melting the wax and vaseline together with a gentle heat, and stirring the mixture until it hardened, combining one part of yellow wax with four of vaseline, which proportion gave the ointment sufficient firmness, except, perhaps, in very hot weather, when the proportion of wax might be increased to one to three. Dr. Theobald also exhibited a specimen of ointment of the yellow oxide of mercury, containing two grains to one drachm of vaseline cerate, which, though prepared nearly four months since, and kept with no special care, still retained its bright-yellow color, and had undergone no appreciable change. He had been told that cerates prepared with vaseline were in use, but was not aware that attention had been called to the convenience of employing them in the manner suggested.

BLINDNESS FROM RETINAL THROMBUS IN CONSEQUENCE OF FACIAL ERYSIPELAS.—Dr. H. KNAPP, of New York, read a paper in which he reported a case of this sort. There were on record a certain number of cases of blindness following facial erysipelas. These symptoms varied considerably. Ophthalmoscopic examinations during the first stage of the affection had been lacking. Not long ago he had had the rare opportunity of observing such a case almost from the beginning to the end. A man, forty years of age, had lived in the tropics, had had syphilis, with secondary and tertiary symptoms, which were aggravated when he came North. On the 20th of March, 1883, while in New York, he had an attack of erysipelas, which began upon the nose, and proceeded to the pharynx, cheeks, and orbits. He was under the care of Dr. Guleke and Dr. Schottky, who kindly

allowed Dr. Knapp to publish the case. The erysipelas progressed, and on March 28th the man was totally blind in both eyes. Reserving a detailed discussion of this case for publication in the "Archives of Ophthalmology," Dr. Knapp restricted himself to the following remarks: 1. The blindness was produced by compression of the central retinal arteries and subsequent thrombosis of the retinal veins, both having been directly observed with the ophthalmoscope one day after the occurrence of the rapid, almost sudden loss of sight. 2. The ophthalmoscopic appearances, observed from beginning to end, showed no neuro-retinitis, but the successive stages of a thrombosis. 3. The decrease of the swelling of the orbital tissue, or the establishment of collateral circulation from the choroid, permitted the return of a limited flow of blood into the retinal arteries, which, however, was impeded by the blocked veins, leading to renewed extravasation, to thrombosis and shrinkage of the arteries, and finally to atrophy of the optic nerve. 4. Perivasculitis played no part, or only an unimportant part, in the pathology. 5. The white segments in the veins and arteries were white thrombi and hypertrophy of the walls of the blood-vessels. 6. Thrombosis was present, in all probability, in the orbital veins also, but did not, as in other cases, extend to the cerebral sinuses.

The paper was discussed by Dr. KIPP.

CHANGES IN REFRACTION RESULTING FROM A BLOW.—Dr. W. H. CARMALT, of New Haven, read a paper on this subject. R. A. S., twenty years of age, a student in Yale College, myopic since the age of twelve, consulted him October 23, 1882, stating that while practicing in the gymnasium the day before he had fallen violently forward, striking his right eye upon a bolt projecting from the floor. The blow was sufficiently severe to give rise to disturbance that obliged him to keep quiet for the remainder of the day and evening. At the time of his visit he felt quite well again, except with reference to his eye. Wearing his glasses habitually for all purposes of vision, near or far, he now felt an uncomfortable sensation in looking through his right glass, and could see much better at a distance without it—better, indeed, than he remembered ever to have seen before without glasses, but, for all that, he had a very confused sensation when looking with both eyes, either with or without glasses. Four months afterward he was again consulted, when he found, on ophthalmoscopic examination, that there was no conus at the nerve, nor other evidence of retino-choroidal trouble. By oblique illumination no opacity of the lens was detected. On the following day, at Dr. Carmalt's suggestion, the patient saw Dr. Loring, of New York, in consultation. To summarize the facts of this case, unique so far as he knew, it seemed established that in a case of myopia of very considerable and nearly equal degrees in the two eyes, one was reduced by the impact of a blow to a condition of astigmatic myopia, which resolved itself finally into a cross astigmatism without any loss of acuity of vision or range of accommodation. To account for the mechanism of this change, five possibilities presented themselves: 1. A change in the shape of the cornea. 2. A diminution or shortening of the axis of the globe. 3. A displacement or dislocation of the lens backward. 4. A change in the relative position or arrangement of the lenticular fibers. 5. A pre-existing spasm of accommodation, the tonicity of which had been released by the paralytic effect of the blow. Dr. Carmalt excluded, as did also Dr. Loring, change in the length of the eyeball, dislocation of the lens, and the previous existence of spasm of accommodation. The remaining alternative could not be urged from any knowledge we had of such a condition having been positively determined. It was urged rather as a refuge, all the other explanations having been disproved or not being satisfactory. Was it not possible that a sudden and violent impulse could have shaken and so displaced the denticulate artien-

lations of the lens fibers that they became fastened in a position to correspond to, or cause, the error of refraction indicated?

The paper was discussed by Dr. KNAPP, Dr. NOYES, Dr. SEELY, Dr. WEBSTER, Dr. BULLER, Dr. MCKAY, and Dr. F. B. LORING.

A FURTHER MODIFICATION IN CATARACT EXTRACTION.—Dr. E. W. BARTLETT, of Milwaukee, Wis., read a paper with this title. The modification proposed was, to do two preliminary iridectomies in certain difficult cases, one upward and one downward. Two cases were related to illustrate the modification. It was suggested in difficult cases only, as when the eye was very prominent, when the iris did not react to atropine, or attachments had formed between the iris and the capsule, when the other eye had been lost and the least amount of risk should be taken with the other eye, when the patient was very infirm and danger from shock was very great, and when the cataract was maturing very slowly. In such cases this modification gave the patient a better chance of securing a certain amount of sight than the method of doing the whole operation at one time.

BLEPHAROPLASTY ACCORDING TO THE ENGLISH METHOD.—Dr. E. GRUENING, of New York, read a paper on this subject. A young man sustained an injury of the face by the explosion of a petroleum lamp. As a result of the mishap, the integument of almost the whole forehead, the right temple, the right cheek, and the corresponding half of the nose was changed into dense cicatricial tissue. The upper lid was wholly everted, and its free border attached to the upper orbital margin. To correct the deformity, the lid was detached from the orbit, the neighboring tissues were released, the deep scar was excised, and the free borders of both lids were brought into apposition and united by sutures. The surface of the wound measured forty millimetres in the vertical and fifty-five millimetres in the horizontal direction. In order to cover the defect, a flap was transplanted from the inner surface of the left arm, prepared according to Wolfe's suggestion: i. e., deprived of its subcutaneous cellular and adipose tissue. After careful coaptation of the flap to the edges and the surface of the wound, gold-beater's skin and a bandage were used to maintain it in position. No discoloration, no displacement of the flap ensued; it united firmly with the wound, and the ectropion was corrected. To-day—i. e., nine months after the operation—the flap measured fifteen millimetres in the vertical and thirty millimetres in the horizontal direction. The shrinkage took place during the first four weeks after the operation. The result was very satisfactory, and could not have been obtained by any other method.

The paper was discussed by Dr. WADSWORTH, Dr. KIPP, and Dr. ANDREWS.

LOSS OF AN EYE FROM SEWER-GAS AFTER EXTRACTION OF A CATARACT.—Dr. MCKAY, of Wilmington, reported the case of John H., a German brewer, sixty-one years of age, who was operated upon April 16, 1882, for senile cataract, without an anæsthetic, by Graefe's method of linear extraction. The upward operation was performed satisfactorily, and without accident. He counted fingers immediately after the operation. The eye was covered with absorbent cotton and a light flannel pressure bandage, without the further introduction of a mydriatic. Three days and a half after the operation the bandage became somewhat loosened. The eye was examined, and atropine was introduced. The incision had closed, the cornea was clear, the pupillary field was dark, and vision, tried for a moment, was very encouraging. The patient subsequently showed symptoms of some general disease, evidence of contamination of the atmosphere by sewer-gas was detected, and finally the eye was lost, in consequence, as Dr. McKay believed, of the poisoning of the general system produced by this noxious agent.

(To be concluded.)

AMERICAN OTOLOGICAL SOCIETY.

THE sixteenth annual meeting was held at the Hotel Kaaterskill, Catskill Mountains, New York, July 17, 1883.

Morning Session.

The society was called to order at 10.30 A. M., by Dr. J. S. PROUT, of Brooklyn, Vice-President, the President, Dr. J. ORNE GREEN, of Boston, being absent.

A CASE OF PRIMARY EPITHELIOMA OF THE AURICLE; REMOVAL OF THE ENTIRE AURICLE BY THE THERMO-CAUTERY.—Dr. W. W. SEELY, of Cincinnati, read a paper on this subject. A man, sixty years of age, was bitten on the ear by a rat six years ago. The wound never healed, but was finally succeeded by the growth which was removed. During the last year the latter had increased in size rapidly, and bled easily on irritation. The original wound was near the summit of the helix. The tumor was removed by means of the thermo-cautery, the hæmorrhage being only slight. The entire surface of the stump was covered with a thick layer of powdered boric acid, and the patient was sent home within five weeks with a perfect scar. Dr. Seely regarded primary epithelioma of the auricle as rather rare. Although in this case the thermo-cautery acted well, he thought the knife, with torsion of the arteries, was preferable. He also believed that under the boric-acid treatment the healing period of the wound was reduced at least one half.

Dr. H. KNAPP, of New York, thought it rare for epithelioma to arise from a wound.

Dr. SEELY thought it generally accepted that epithelioma might be due to injury, and asked what Dr. Knapp would regard as the cause in cases of epithelioma of the lip, supposed to be due to using clay pipes, etc.

Dr. KNAPP said that the pipe might produce constant irritation of the lip, but he thought that it was not exactly trauma.

Dr. SEELY regarded it as the perfection of trauma. The special point of interest in his specimen was its occurrence in a region where neither traumatism nor epithelioma was likely to develop.

INVITED GUESTS.—Dr. STRAWBRIDGE, of Philadelphia, introduced Dr. ANDREWS and Dr. L. WEBSTER FOX, of Philadelphia, and they were invited to attend the meeting.

ON THE INTERMITTENT PERCEPTION OF SOUND, AS CONVEYED THROUGH THE AIR AND CRANIAL BONES, WITH A BRIEF SUMMARY OF THE RESULTS OF TREATMENT IN CHRONIC AURAL AFFECTIONS WITH IMPAIRED HEARING.—A paper with this title, by Dr. J. A. ANDREWS, of Clifton, N. Y., was read by title, and referred to the Committee on Publication.

THE RECOGNITION OF BRAIN COMPLICATION IN AURAL AFFECTIONS.—Dr. ANDREWS then read a paper on this subject, which contained the clinical histories, together with the records of antopsies, of five cases of brain disease secondary to ear disease under his own observation. Special attention had been directed to the condition of the eye, and in all his cases the ophthalmoscope had revealed either papillitis or a hazy, slightly œdematous appearance of the optic-nerve disc—very valuable corroborative evidence of a cerebral complication, especially where the other symptoms were obscure. Dr. Andrews believed that most ophthalmologists would indorse the statement that optic neuritis and vision of $\frac{2}{3}$ were not incompatible. The existence of a cloudy disc in cases of ear disease should excite suspicion, and he believed that the condition of the optic-nerve disc furnished evidence which had not received the attention it deserved. In the majority of cases reported, the condition of the eye was referred to only incidentally. In one case there was a cerebral abscess, which Dr. Andrews thought had undoubtedly existed for twelve years. It was also a significant

fact, in connection with cerebral localization, that cerebral abscess secondary to ear disease was usually in the medullary substance, and seldom in the cortex. The significance of special symptoms, as vertigo, vomiting, headache (more continuous and less paroxysmal than with brain tumor), œdema over the mastoid, etc., were considered. Fever was very often absent. The sight was most affected on the side of the brain lesion.

Dr. KIPP, of Newark, N. J., had published a number of cases in which eye symptoms were present, and also stated that Dr. Knapp had since published several. Dr. Kipp's published cases preceded those reported by Zaufel.

Dr. SEELY, of Cincinnati, had examined the eyes with the ophthalmoscope in cases of suppurative middle-ear disease, but so far with negative results, and he thought that definite results had not yet been obtained in that direction.

Dr. STRAWBRIDGE, of Philadelphia, said that, after Dr. Roosa directed attention to this subject at Newport, he had examined the eyes of all his patients suffering from suppurative middle-ear disease, but without satisfactory results. He had also made analyses of the urine, and had frequently found large quantities of albumin present when brain complication existed.

Dr. KIPP said he had continued his observations, and had found, in cases in which meningitis was present, that there was almost always a change in the fundus, something like optic neuritis, between œdema and actual inflammation of the nerve. The change had been stated to take place only in cases in which cerebral complications existed.

Dr. ANDREWS said he alluded only to those cases in which brain complications were suspected. In all his cases he had examined the urine with negative results.

Dr. SEELY did not doubt that in cases of actual brain complication more or less evidence would be found in the fundus oculi, but in such cases the ocular symptoms were less important than in those where the question of diagnosis was doubtful, or in the cases of suppurative middle ear disease as they were generally seen. He had observed two or three cases in which there were marked changes in the eye on the side of the affected ear, but these passed away, and he was left in doubt whether there was very much affection of the brain.

Dr. KIPP believed that optic neuritis might exist with ear trouble, and pass away as the brain affection ceased.

Dr. BARTLETT, of Milwaukee, regarded ophthalmoscopic examination as very valuable in the acute stage of meningitis. A slight cloudiness of the fundus indicated that degeneration of the parts of the brain involved had not yet taken place, but, when degeneration had begun, the appearances in the eye disappeared, sight improved, etc. For the alienist, therefore, such examinations were important.

Dr. SAMUEL SEXTON, of New York, asked if the ophthalmoscope had been found of service as a means of diagnosis where other symptoms had not been prominent, especially in fatal cases of meningitis and cerebral abscess.

Dr. KIPP had examined many hundreds of cases of otitis media, and had not found any with eye symptoms in which there were not other signs of brain complication.

Dr. KNAPP thought that the ophthalmoscope sometimes gave most valuable evidence, more so than could be obtained from the patient. In one of his published cases the œdema was very slight, while the pain and other subjective symptoms were marked, and had existed for some time; but, as soon as the symptoms became severe and pointed toward a fatal termination, the optic disc was swollen, first upon one side and then upon the other. The recession of the ocular appearances had guided him with regard to allowing the opening made in the mastoid to close, and in just these cases ophthalmoscopic examination had been of great value. When the optic disc became

normal, and the discharge from the mastoid was slight, the opening could with safety be left to close, and he thought he had in this way abridged the period of healing materially.

The paper was further discussed by Dr. SEXTON, Dr. STRAWBRIDGE, Dr. SEELY, Dr. KNAPP, and Dr. KIPP.

EXTERNAL AND INTERNAL INFLAMMATION OF THE MASTOID, WITH CASES.—This paper, by Dr. SEXTON, was read by title, and referred to the Committee on Publication.

CASE OF ACUTE DESQUAMATIVE INFLAMMATION OF THE EXTERNAL AUDITORY CANAL; ACUTE OTITIS MEDIA; MASTOIDITIS; AND CHRONIC MENINGITIS; RECOVERY.—The case was reported by Dr. READ J. MCKAY, of Wilmington, Del.

CASE OF MASTOID DISEASE; ARTIFICIAL PERFORATION OF THE BONE; TEMPORARY RELIEF; DEATH FROM PYÆMIA.—Dr. C. H. BURNETT, of Philadelphia, read a paper giving an account of a case of chronic purulent inflammation of the middle ear inducing general increased vascularity of the pyramidal part of the temporal bone, and hyperostosis of the outer wall of the mastoid groove without necrosis. The mastoid cavity became filled with cheesy debris, and this, furnishing a pyæmic source of embolism, was followed by embolism of a chronic form, as shown, first, by abscess in the lung, and then by infiltration of the liver with abscesses. Dr. Burnett thought trephining of the bone was comparatively free from danger, and that it afforded the one slim chance of escape from death in cases of true mastoid disease, which must necessarily furnish an embolic source for the production of inflammation, purulent and cheesy debris being pent up in the mastoid cavity. In such cases there were the chances of death from embolism, while there were none from the operation. In the case reported, the patient survived the mastoid operation two weeks, and the wound was nearly healed, when the man was seized with a chill and rapidly sank from embolic hepatitis.

These papers gave rise to an extended discussion on trephining of the mastoid when involved in middle-ear disease.

Dr. STRAWBRIDGE had never performed the operation upon the living subject. He had seen about five thousand cases of purulent middle-ear disease during the last twelve years, and had not had occasion to trephine a single mastoid. Nor had he but a single death, which occurred in a child six months old, that died a few hours after he first saw the case. In studying the subject he had been struck with the very small percentage of cases in which pus was found after the bone had been trephined. He would ask if the absence of pus was not evidence that the operation had not been indicated.

Dr. KNAPP said that the mastoid had been trephined with marked benefit in quite a number of cases in which pus had not been found. Such cases had been reported by Hartmann, and also by himself. His firm conviction was that, when chronic middle-ear disease, even without suppuration or perforation, was attended with more or less obstinate constant pain, which had its origin in the mastoid process, and radiated from there over the corresponding half of the face and side of the head, trephining the mastoid was indicated.

Dr. SEXTON had not seen so many cases requiring opening of the mastoid as had been mentioned by several authorities, as Buck, Schwartz, and others, and only a very few in which he had thought the operation might be necessary, without some further evidence than the pain in the mastoid. He thought there might be danger in attributing too much importance to pain as a symptom in these cases. With regard to operative procedure, it had happened to him to be able to liberate the pent-up secretion through the posterior wall of the auditory canal, and he thought that in a large majority of cases pointing took place in that direction, rather than toward the brain. He regarded early constitutional treatment as especially important, particularly by

the use of sulphide of calcium, of which he seldom, of late, had given more than one tenth of a grain at a dose, and frequently a much smaller quantity, repeating it perhaps every one or two hours; of course, the liberation of pus when formed was a well-established surgical procedure, and must not be omitted.

Dr. THEOBALD, of Baltimore, said that his experience had been similar to Dr. Strawbridge's, and, so far, he had opened the mastoid only upon the dead subject. He did not believe that the indications for performing the operation occurred very frequently. Early constitutional and local treatment he thought would have cured most of the patients in whom the mastoid had been opened. He regarded leeches as exceedingly serviceable.

Dr. KIPP thought that the operation was essentially harmless, and believed it to be better to operate and not find pus than to allow the case to go on to the death of the patient with pus in the mastoid cells, where by an operation it could have been removed. He maintained that there were cases in which suppuration occurred in the mastoid irrespective of constitutional treatment.

Dr. BARTLETT had not found it necessary to trephine the mastoid. He had relied on poultices, applied every half hour, as hot as the patient could bear, and had seen several cases in which pointing took place within twelve hours. The pus was then let out with an ordinary scalpel, cutting through into the mastoid.

Dr. STRAWBRIDGE corroborated Dr. Bartlett's experience concerning the value of poultices.

Dr. C. H. BURNETT thought that poulticing could not produce much effect upon the mastoid cells if the external wall of the process was intact.

Dr. JONES, of Chicago, thought no general rule could be laid down; but that each case must be treated independently according to the conditions present.

Dr. E. E. HOLT, of Portland, Me., had had forty cases of mastoid disease in two thousand cases of ear disease of all kinds. He had not perforated the mastoid, and had had but three deaths, all of which could be explained without reference to the condition of the mastoid. He had used leeches more than any other measure, unless it was incision.

The subject was further discussed by Dr. SEXTON, Dr. BURNETT, and Dr. KNAPP.

TERATOID TUMORS OF BOTH AURICLES, HAVING A CLINICAL HISTORY OF RECURRENT FIBROIDS.—Dr. HOLT read a paper in which he reported the case of a woman twenty-nine years of age, of light complexion, and usually of good health. These morbid growths were of unusual interest in the following respects: 1. They promptly followed perforation of the lobes and wearing of gold ear-rings. 2. They had repeatedly occurred during a period extending over twenty years. 3. They had undergone a remarkable change in structure. In proof of this latter assertion, a portion of a letter was read from Dr. John H. Ripley, of New York, who had removed the tumors several times, and who stated that they contained nothing but dense interlacing fibrous tissue. An exhaustive examination made of the recent growth by Dr. Edward Preble, of Portland, however, showed that they contained germinal matter in abundance, with the following tissues: Myxomatous and adenoid tissue, giant cells, fibro-plastic tissue, loose areolar tissue with infiltrated fat, innumerable elastic fibers, fine and coarse fibrous tissue, hyaline, reticular, and fibro-cartilage, smooth muscle, fragments of large blood-vessels, well-developed skin with corium, papillæ, rete mucosum, and epidermis, hair follicles, hair and sebaceous glands, together with certain unclassified structures.

Evening Session.

The society was called to order by the Vice-President, Dr. J. S. PROUT.

INVITED GUESTS.—Dr. MURDOCH, of Baltimore, Dr. H. W. WILLIAMS, of Boston, and Dr. R. H. JOHNSON, of Philadelphia, were introduced, and invited to remain in attendance.

AMENDMENT TO THE BY-LAWS.—Dr. JOHN GREEN, Chairman of the Committee on Membership, offered the following: The first by-law, relating to the election of members, shall be amended so as to read, "after the report of this committee has been received and at the same meeting," etc.

CHRONIC INFLAMMATION OF THE MASTOID CELLS WITHOUT PERFORATION OF THE MEMBRANA TYMPANI.—Dr. SEXTON presented a patient who had formerly been under his care with this affection. The case had been complicated with ozæna. This case opened the discussion again on the question of trephining the mastoid, which was participated in by Dr. GRUENING, of New York, who argued very strongly in favor of the operation, Dr. KIPP, Dr. BARTLETT, Dr. THEOBALD, Dr. BURNETT, Dr. SEXTON, and Dr. WEBSTER.

OBSERVATIONS ON THE HEARING POWER IN DIFFERENT CONDITIONS.—Dr. HOLT read a paper in which he gave the results of examinations of four series of persons: 1, Twenty-four patients with chronic non-suppurative otitis media from private practice; 2, twenty-four machinists; 3, twenty-four boiler-makers; and, 4, twenty-four persons with normal ears. The hearing power was tested by the voice, the tick of a stop-watch, the tuning-fork, and Koenig's rods, and the average age, ratio of bone conduction to aerial conduction, and the audibility of Koenig's rods in these series of tests were compared with each other and with the normal ear. It was ascertained that the ratio between bone and aerial conduction diminished in corresponding degree to that of the hearing power for the voice, and that the average audibility for the upper limit of Koenig's rods was quite equal to the average normal of 40,000 V. S., as determined by Dr. Blake. Therefore, the conclusion was drawn that the loss of hearing in the machinists and boiler-makers was due much more to a defect in the conducting than in the perceptive part of the organ of hearing, for the following reasons: 1. Because of a history or present condition of catarrh of the middle ear and naso-pharynx. 2. Because the tuning-fork, when placed vibrating between the central teeth, was heard louder and longer in the non-affected ear, and the sound of it was invariably increased by pressing on the tragus and closing the meatus. 3. Because, had there been any considerable disease of the labyrinth, they would not have responded so nearly to the normal average audibility for the upper limit of Koenig's rods, since such an astute observer as Dr. Blake, who had made extensive use of them, had never had a case of labyrinth disease without a "marked loss of hearing for the Koenig rods." In regard to hearing in a noise, several of the three series of persons stated that they could hear better in a noise. These were carefully tested in a quiet place and then in a noise, and in every instance there was no improvement of hearing in a noise; on the other hand, when the voice was used at the same time, it was not heard quite so well in the noise as in a quiet place.

THE ASSOCIATION OF AURAL DISEASE WITH SIMPLE SPARKLING SYNCHYSIS OF THE VITREOUS HUMOR.—Dr. KIPP read a paper in which he stated that, in six of the seven cases of synchysis of which he had records, aural symptoms were present. In the seventh case it was not known whether or not ear trouble existed. In five of the cases the synchysis scintillans existed in only one eye, and in two of them the ear of the same side only was affected. In the other three both ears were diseased. In four of the cases the ear trouble probably involved both the

middle ear and the nervous apparatus. In one case there was chronic suppuration of the middle ear, which had been preceded for years by impairment of hearing without otorrhœa. In the sixth case there had been absolute deafness of one ear since infancy. Otological literature contained no record of similar cases, and the author thought that the association of the two affections in his cases might have been merely accidental. They were related with a view of inducing others to examine their patients with synchysis for aural trouble, and thus settle this question.

The paper was discussed by Dr. W. S. LITTLE, of Philadelphia, and Dr. WEBSTER, of New York.

ANOMALOUS SEBACEOUS GLAND IN IMMEDIATE PROXIMITY TO THE AURICLE.—This was the title of a paper by Dr. CHARLES A. TODD, of St. Louis, which was read by title and referred to the Committee on Publication.

THE SIGNIFICANCE OF THE TRANSMISSION OF SOUND TO THE EAR THROUGH THE TISSUES IN AURAL DISEASE.—Dr. SEXTON read a paper with this title. It was discussed by Dr. BURNETT, Dr. HOLT, Dr. ANDREWS, and Dr. KIPP.

Dr. SEXTON then exhibited fourteen photographs of various forms of ear affections; also two ear syringes, together with a hooked curette for removing foreign bodies from the ear where it was necessary to use a forceps.

OBSTINATE PURULENT DESQUAMATIVE OTITIS MEDIA.—Dr. KNAPP read a paper in which he reported a case that was finally cured. He laid special stress upon the fact that, where there was desquamative otitis media, palliative treatment produced only temporary benefit, and that to effect a cure it must be converted into an acute case, a condition that could be cured. The case was a new confirmation of views which he had expressed before the society two years before concerning the treatment of granulations and polypi. He had then stated that in cases of diffuse granulations and broad sessile polypoid excrescences he abstained from destroying them by caustics or sharp instruments, because these procedures were likely to destroy essential parts of the drum cavity, and terminate in replacing the membrane by cicatricial tissue, thus bringing about an unpleasant condition known as sclerosis. The only reasonable plan was to change the condition of the parts, and this he accomplished by instillations of warm water, and by keeping the parts moist with cotton steeped in glycerin.

A somewhat prolonged discussion followed on the question whether or not a new drum-head was ever actually formed after being destroyed by disease.

The society then went into executive session, and afterward adjourned, to meet in 1884.

NEW MEMBERS.—Dr. W. S. LITTLE, of Philadelphia, Dr. B. E. FRYER, U. S. Army, Fort Leavenworth, Kansas, Dr. R. O. BORN, of New York, and Dr. J. A. LIPPINCOTT, of Pittsburg, Pa., were elected to membership.

Officers for the ensuing year were then elected. [The list was given in our last issue.]

COLLEGE OF PHYSICIANS OF PHILADELPHIA.

Meeting of March 7, 1883.

THE HISTORY OF A CASE OF ABDOMINAL CYSTIC TUMOR, WHERE SEVEN YEARS AFTER REMOVAL OF THE TUMOR BY LAPAROTOMY A SECOND OPERATION WAS DEMAND: TAPPING THROUGH THE VAGINA RESORTED TO, WITH CONSEQUENT DEATH OF THE PATIENT.—Dr. WALTER F. ATLEE read the following paper:

Bene facit qui ex erroribus suis exemplum aliis præbet.

In June, 1875, I removed, by laparotomy, in the St. Luke Hospital, Bethlehem, a multilocular cyst from Mrs. DeM. The history of the case was given by Dr. Stout to the Board of

Trustees, and published in their second "Annual Report." The whole mass removed at the operation weighed $78\frac{1}{2}$ pounds. The lobes and lobules composing it were made up of cysts containing fluids of different densities, colors, and other physical properties. The pedicle appeared to arise from the rectum; at all events, the cyst wall was separated from everything else, except the front of that intestine, and the only ligature used was there applied. The whole vascular supply was derived from meso-rectal vessels. Of course, the clamp could not be used. As always, in sewing up the incision in the abdominal walls, I carefully included the peritonæum in the sutures, as in this way adhesions of intestine and omentum, with the consequent discomfort and constipation suffered by the patient, are never observed, and, moreover, in case a second ovariectomy should have to be performed, the operation could be performed with much more ease and safety.

This patient recovered from the operation, though somewhat slowly, owing to delay and difficulty in removing the ligature, which was left hanging out of the external wound, and not cut short and left inside the abdomen, as is now generally practiced. She remained in perfect health for seven years, but in the summer of 1882 came to my office complaining of considerable discomfort in the pelvis, where I detected, by the touch, the presence of a swelling, caused by a thick, viscid fluid; in other words, there was plainly a second tumor formed there. This continued to enlarge, and in the month of January the suffering it occasioned was so immediately threatening to the patient's life that it was necessary to act. Great efforts were made to push the tumor out of the pelvis, but this was not to be accomplished. It remained to operate as before, and remove the mass by laparotomy, or to give relief by emptying the cyst by tapping through the vagina. The latter procedure was preferred, and about three pints of a very thick, dark-colored fluid were drawn off by a Thompson trocar. There was no difficulty about the operation, nor was it attended by any particular pain, nor was there any hæmorrhage. The next day the patient felt herself completely relieved, but after that her pulse became quickened, and a general febrile condition, unpreceded by chill, succeeded. There was evident tenderness on pressure over the lower part of the abdomen, but no severe pain independent of this pressure. The stomach became so irritable as to reject everything swallowed. Death took place on the eighth day, under the marked symptoms of depression which accompany pyæmia. It was a death, most plainly, from cyst inflammation.

Notwithstanding the great number of cases of operation for ovarian disease reported nowadays in journals more or less medical, this case is really one deserving of record, and one of true and special interest to the pathologist and to the surgeon.

In removing the large mass in the first operation, in this case, it was noticed that no pedicle was found. It was separable by the fingers everywhere except from the front of the rectum, where it was necessary to apply a ligature and divide the attachment with scissors. The ovaries, as we all know, are situated in the posterior fold of the broad ligaments, on the sides of the highest part of the uterus, behind the Fallopian tubes and the round ligaments, which separate them from the bladder, and in front of the rectum, from which they are commonly separated by the lowest circumvolutions of the ileum. By a rounded cord, the ligament of the ovary, they are attached internally to the womb, and externally by two folds of the peritonæum to the sides of the pelvis.

As the ovary, in its normal condition, is not pediculated, at first, of course, a diseased ovary has no true pedicle. As it becomes larger, this pedicle is formed from changes in its normal connections with the adjacent womb; it consists of the Fallo-

pian tube often much elongated, the broad ligament often considerably thickened, the utero-ovarian ligament occasionally hypertrophied to a large fibroid stem, the round ligament, and enlarged blood-vessels. If the tumor rises out of the pelvis the pedicle will be longer, and if bound down in the pelvis from early adhesions it will be shorter.

In some cases, however, and they are by no means rare ones, when cystic tumors are removed from the abdominal cavity, no such pedicle as the one just described is met with. In the case whose history I have been relating it was said that there was no distinct pedicle, and that the whole vascular supply came from the vessels of the meso-rectum. It may naturally be supposed that this was owing to the way in which the diseased mass may have been separated from its surroundings, and I therefore call attention to the fact that the same thing has occurred in the practice of an operator such as Spencer Wells. In his "Diseases of the Ovaries," in relating Case CX, he says that he found no pedicle, and that the tumor derived its vascular supply from the omental and mesenteric vessels.

It seems to me most reasonable to look upon some of the abdominal tumors having these connections, not as enlarged and diseased ovaries, but as changed ovules, which have failed to enter the Fallopian tubes, have slipped in the interstices of the neighboring organs, become attached, received blood, and grown. In women, when the Fallopian tube has become adherent, in place of floating loosely, the ovule is not grasped as it leaves the ovary, and then it is not rare to see ten, fifteen, twenty, or even more small cysts, some as large as a pea, on the parts immediately in contact with the ovary. (See Sappey, vol. iii, p. 644.)

If one of these misplaced ovules was attached to a spot where plenty of blood was supplied, a large cyst could be formed, having no distinct pedicle, as in the case before us. As is seen in cases of extra-uterine foetation, a well-made child can be formed in this way from a fecundated ovule, and we may suppose that from an unfecundated one a monstrous polycystic growth should form.

Although out of the way, I wish to mention here that the only two cases in which I have been consulted on account of a return of abdominal cystic tumors were where there was no pedicle, and where the chief vascular supply came from the vessels in front of the rectum. One case is the one now under consideration, and the other is the one published in the "American Journal of the Medical Sciences" for January, 1883, on account of the bladder having been opened during the operation.

My reason for reporting this case, however, is not to advance any particular views in regard to the pathology of certain polycystic tumors of the abdominal cavity, but in order to speak of the mistake made in the treatment. In the words of one who has done as much as any other to advance our knowledge of the treatment of abdominal tumors, "Mistakes teach most valuable lessons, and, when discovered, are not likely to be repeated. Hence, in medicine, they should be recorded for the benefit of science and of humanity." ("General and Differential Diagnosis of Ovarian Tumors," by Washington L. Atlee, in preface.) When this case presented itself it was necessary to act; a speedy and most painful death was inevitable unless relief were afforded. It remained to choose between the removal of the cyst and the emptying of its contents by tapping through the vagina, the only way practicable of introducing a trocar. On account of the operation previously performed, and the impossibility of moving the mass in the pelvis, its removal was not attempted. A previous operation is not necessarily an objection; Dr. Washington L. Atlee records two cases where a second operation was performed, and in both successfully. Spencer

Wells, in his table, gives thirteen cases in which he removed an abdominal tumor from a patient who had previously undergone the operation, and eleven of them were successful. Here, however, the immovability of the tumor was such as to make me positively sure that the attachments were so great as to render its removal impossible.

Of tapping through the vagina I had had no personal experience whatever, and what is recorded by others, although not, as a general rule, favorable to the plan, did not deter me from it. Scanzoni goes so far as to say that if puncture by the vagina were always possible, abdominal puncture would soon completely disappear from surgical practice. The sac, opened in its lowest part, can empty itself more completely. (Scanzoni, "Traité pratique des maladies des organes sexuels de la femme," Paris, 1858.) Peaslee says that there are three considerations to deter us from it in all ordinary circumstances: 1. The vessels are larger and more numerous at the lowest part of the tumor; 2. If polycystic, the largest cysts are not at its lowest part; and 3. There is greater risk of wounding other organs. (Peaslee, "Ovarian Tumors, their Pathology, Diagnosis, and Treatment, especially by Ovariectomy," 1872.)

Emmet writes that he has punctured several cysts with a trocar from the vagina, and in every instance more or less cellulitis has resulted. This might, however, destroy the cysts, but he is not able to determine that, for all the cases passed from under his observation. (Emmet, "Principles and Practice of Gynecology," 1880.)

Thomas says that by this method two of the dangers of tapping—secondary escape of fluid into the peritonæum, and consequent peritonitis—are unquestionably avoided, but others are as surely increased, namely, those of injury to portions of the intestine and entrance of air into the sac, with consequent decomposition of the contents, septicæmia, and inflammation of the sac walls. His experience with the method is not large, but it leads him to agree with Spencer Wells. (Thomas, "Diseases of Women," 1872.)

Spencer Wells says that tapping through the vagina is more liable to be followed by inflammation of the cyst than tapping through the abdominal wall, because it is not easy to prevent the entrance of air. The operation of tapping through the vagina is selected, not so much with the intention of simply emptying the cyst as for the chance that, should the fluid escape by the opening as fast as it is secreted, the cyst may gradually contract, and the puncture close. This favorable result, however, is seldom secured. As a rule, air enters the cyst, the opening fills up, the fluid remaining in the cyst, or that newly secreted putrefies. Suppurative inflammation of the lining membrane of the cyst comes on, and is accompanied by a low form of septic fever or pyæmia, which can only be relieved by making and maintaining a free outlet for the discharge. The frequency of these consequences should make tapping by the vagina an exceptionable practice, but it may be adopted in cases where an ovarian cyst is bound down in the pelvis by adhesions, and it is necessary to relieve the distress caused by pressure on the bladder and rectum.

The cannula or an elastic catheter may be left in the cyst, though it is safer practice either to introduce a wire seton or a drainage tube, so as to prevent the opening from closing, and make sure of the free and immediate escape of any fluid that may be secreted. Even with every care, however, Mr. Wells concludes, from his experience, that patients are so apt to suffer from some of the ill effects of long-continued suppurative processes that it is better, even at considerable risk, to remove a cyst, if at all possible, than to trust to any mode of drainage. (Spencer Wells, "On Ovarian and Uterine Tumors, their Diagnosis and Treatment," 1882.)

Dr. Charles West, whose opinions have for me, at least, extraordinary importance, greater, indeed, on such a point than those of any other man, says that there is no doubt but that inflammation attacking parts within the pelvic cavity is less apt to extend to the peritonæum than when it attacks an abdominal organ; of which rule pelvic cellulitis and inflammation of parts within the folds of the broad ligaments are apt illustrations. It is equally incontestable that pelvic peritonitis is less apt to become generalized than is similar mischief originating in the abdomen. Cyst inflammation is so dangerous, however, that it is doubtful if vaginal tapping may be employed, even when the cyst is simple. Its dangers are incalculable. The dangers of ovariectomy are far less. Except when a cyst is impacted in the pelvic cavity, he does not recommend tapping *per vaginam*. (West, "Lectures on Diseases of Women," 1879.)

Our best authorities, therefore, teach us that the tapping of polycystic tumors at least must be avoided; that the removal of the cyst is to be practiced in preference; that when impacted in the pelvis, so that it interferes with the performance of functions absolutely necessary to life, tapping, to which we must have recourse, is particularly dangerous, owing to the frequency of cystic inflammation, and consequent death from septicæmia. In my case I thought to avoid this by taking precautions to hinder the entrance of air into the cyst, but it took place notwithstanding, and the death of the patient was occasioned by it in eight days.

If, unhappily, I should ever again be called upon to try to relieve a similar case, I should act differently, and, not relying upon any means to prevent the setting up of cystic inflammation, do more to establish a free outlet for the noxious products by which the system is poisoned, and do everything in my power to prevent their formation by topical applications to the secreting surfaces of the cyst.

Dr. Noeggerath ("Ovariocentesis Vaginalis," "American Journal of Obstetrics," May, 1869), by pursuing this course, had such good results as to declare himself confident that, where a simple or compound cyst could be attacked through the posterior vaginal cul-de-sac, this operation would take the place of laparotomy. The plan he prefers is to make first a transverse incision, about an inch long, behind the cervix uteri and through the roof of the vagina up to the cyst. This, coming into view, is then evacuated by a free incision, and, finally, the edges of the two incisions are stitched together by five or six silver sutures. The cyst, thus left free and permanently open, is daily washed out with antiseptic injections until it finally contracts, and ceases to afford any secretion. Although, at the present time, it is not likely that in ordinary cases any one would choose to perform this operation in preference to that of the removal of the cyst, yet all experience shows that, when the cyst is so firmly fixed in the pelvis as not to be removable, it diminishes in a marked degree the great danger necessarily incurred by tapping through the vagina—that of poisoning of the system by the absorption of the putrid products of cystic inflammation.

I feel certain myself that I made a sad mistake in not operating in this way, and report this case as a warning to others—*Bene facit qui ex erroribus aliorum sibi exemplum sumit*.

[After the reading of the preceding paper:]

Dr. WILLIAM GOODELL said that he did not think the attachment of the tumor to the rectum was so unique as the return of the tumor. He had on several occasions removed tumors without being able to find the true pedicle, on account of the many adhesions. He could not agree with Dr. Atlee with regard to the origin of the cyst; he did not think it could have come from a wandering ovum, since, in that case, it would have been monocystic.

He regarded tapping *per vaginam* as hazardous, for the reasons given by the late Dr. Peaslee, first, on account of the danger of wounding blood-vessels, and, second, on account of the danger arising from the entrance of air into the cyst. He did not understand why the air could enter the cyst so readily after tapping *per vaginam*. When he performed tapping by this method he employed the aspirator. Returning to the question of the apparent attachment of the pedicle to the rectum, in the case reported, he said that it was quite common not to find a pedicle in some forms of intra-ligamentous cyst, because they had to be enucleated, and referred to the statements of Lawson Tait with regard to this difficulty of determining the origin of the tumor. He desired to call attention to the pathological characters of the recurrent growths, and stated that, according to his observation, they were always malignant, and that they recurred in the stump of the pedicle, or, as he had seen, at the site of the adhesions. He alluded to a case which occurred in his own practice, and to one related to him by Dr. Bantock, of London, which confirmed the statements made.

He asked Dr. Atlee whether he could explain why the air entered so readily into cysts after tapping *per vaginam*.

Dr. ATLEE, in reply, said that he had seen no reason given, but thought it was owing to the difficulty in closing the wound made in the tapping.

Dr. R. P. HARRIS remarked that perhaps he could throw some light upon the cause of this admission of air, from what he had observed in a case of removal of hæmorrhoids. Some years ago, soon after the introduction of the *écraseur* of Chassaignac, he called in the late Dr. Joseph Pancoast, who had obtained the instrument, to make use of it in removing a mass of hæmorrhoids from the rectum of a very anæmic man, rendered such by repeated hæmorrhages after defecation. After the operation, to prevent, as he stated, the suction power of the diaphragm upon the rectum, endangering secondary hæmorrhage, Dr. Pancoast introduced into the anus a small box-wood tube. The effect of this was soon demonstrated: a large drop of serous fluid descended the tube and stopped at its exit; when the diaphragm arose in expiration, the drop was drawn up the tube, and, when it descended in inspiration, it came down again, thus showing the pumping effect of the diaphragm upon the pelvic contents. Let this open tube become an opened cyst with flaccid walls, and we have air pumped into the cyst, as it was into the rectum of our patient.

Dr. J. EWING MEARS asked Dr. Atlee whether a post-mortem examination had been made. He thought the observations of Dr. Goodell with regard to the difficulty of finding the true pedicle in tumors with many adhesions, and to the pathological character of the recurring tumor in these cases, to be correct, as such had been his experience in instances of which he had had personal knowledge. With regard to the entrance of air into the cyst, when tapping was performed *per vaginam*, he thought the explanations of Dr. Atlee and Dr. Harris were correct. A cyst firmly impacted in the pelvic cavity was separated from the vaginal tube by a comparatively thin septum, differing greatly in its anatomical characters from the abdominal wall. The opening made by the trocar in this septum and in the cyst wall attached to it by adhesions did not close perfectly, and the air drawn up into the vaginal tube passed readily into the collapsed cyst.

Dr. ATLEE, in reply to Dr. Mears, stated that no post-mortem examination had been made.

NEW YORK SOCIETY OF GERMAN PHYSICIANS.

A STATED meeting was held June 23, 1882, Dr. A. JACOBI in the chair.

CHANORE OF THE EYELID (?).—Dr. I. P. OBERNDORFER presented a little girl who contracted diphtheria of the pharynx four weeks previously. A few days ago three papules were noticed on the upper lid of the right eye. These gradually became confluent, forming a hard nodule, which subsequently opened, evacuating a considerable quantity of pus. The whole of the lid had become indurated, and the submaxillary glands of the same side were enlarged, so that the speaker had no doubt that this was a case of primary lesion of syphilis. After a careful examination of the case, Dr. Gruening was prepared to corroborate the diagnosis.

Dr. JACOBI was of the opinion that the lesion under consideration was a simple ulcer, that had possibly been maltreated; the discharge of a by no means small quantity of pus from the indurated swelling certainly did not point to syphilis.

Dr. B. SCHARLAU coincided in this view, and thought that the ulcer, originally simple, might have been modified in character by the influence of diphtheritic virus.

Dr. H. C. KLOTZ did not regard the induration, upon which so much stress had been laid, as pathognomonic, since every inflammation of the lid imparted a hard sensation to the touch.

Dr. A. G. GERSTER recollected having seen a very similar case some five years ago; a careful investigation proved the induration of the lid to be a vaccine pustule.

Dr. OBERNDORFER called attention to the fact that the ulcer was hard, circumscribed, and indolent; the three small papules were likewise hard; a simple ulcer or a furuncle would usually be quite painful. He proposed to observe the case closely, and treat it locally; he would report further developments at the next meeting.

Dr. E. GRUENING remarked that swelling of the glands was a rare concomitant of affections of the lid.

Dr. H. S. OPPENHEIMER recalled a case of phlegmon of the upper lid with swelling of the glands in front of the ear.

Dr. GRUENING had not observed this to be the case, except when the temporal region was also involved.

GRANDE HYSTÉRIE IN A MAN.—Dr. SEIBERT presented a young man who had afforded him an opportunity to study the various characteristic manifestations of so-called "grande hystérie." The patient was twenty years of age, married eight months, and had no syphilitic taint; he had been under treatment for "cramps" at Charity Hospital for four months. He had been quite well for a year. On the 4th of June he had experienced some unusual annoyance, and on the following day he had experienced his first attack. The speaker had been present at several of these attacks; the head was drawn back, the eyes were open, staring directly upward, the hands supinated and clenched. The patient would jerk his body alternately into a condition of opisthotonos and relaxation, with great violence. On the 7th of June he suddenly became deaf and dumb, and was unable to swallow. The tongue, hyoid bone, and larynx were found to be in a state of spasmodic rigidity, due to the contraction of the several muscles controlling these organs. The sensorium was not affected; several hours later he had regained the power of speech, hearing, and deglutition. This performance was repeated several times. By pressure on the seventh cervical vertebra, Dr. Seibert could, at will, produce general clonic and tonic convulsions.

Dr. J. RUDISCH remarked that "grande hystérie" was but rarely observed in men. In several cases it had been recorded that the seizures could be produced by pressure on the testicles.

Dr. OPPENHEIMER had seen a very similar case, and had on two occasions succeeded in cutting short the attack by pressure of the testicles.

DOUBLE HALLUX VALGUS.—Dr. GERSTER presented a man who had had double hallux valgus, and on whom he had oper-

ated with success. The pathological condition represented by this painful affection could be defined as consisting in an exostosis of the head of the first metatarsal bone, with inflammatory thickening of the bursal sac and communication of the latter with the metatarso-phalangeal articulation. The operative procedure consisted in the removal of the head of the bone and drainage of the wound. Twelve days after the operation the patient was able to be about in slippers; the functional result was excellent. In walking, the head of the second metatarsal bone was substituted for that removed. The diminution of the size of the sole was too inconsiderable to interfere with locomotion. Dr. Gerster had performed this operation ten times on seven patients.

Dr. SOHARLAU had performed the identical operation ten years ago. The method had originated with Hneter, and Dr. Frank Hamilton had reported it in the "Medical Record."

Dr. OBERNDORFER thought that traction on the extensor hallucis would produce a relapse of the trouble. Dr. Gerster had not witnessed that result.

EXFOLIATIVE METRITIS.—Dr. H. J. GARRIGUES presented a specimen of this affection. [This case was described by Dr. Garrigues in vol. xxxvi of the "New York Medical Journal," p. 587.]

Dr. SOHARLAU recollected having met with a similar case. Klob had described the disease in his work on the "Pathological Anatomy of the Female Sexual Organs," under the name of "putrescentia uteri," and Virchow had characterized it as "internal malignant puerperal erysipelas."

Dr. GERSTER and Dr. KUCHER remarked that they had also observed cases of the kind.

CONGENITAL OBLITERATION OF THE AORTIC OPENING.—Dr. MAYER presented a heart with congenital obliteration of the aortic opening, removed from the body of a child four weeks of age. From the date of birth the labored respiration had attracted attention; in the third week the child turned blue. No radial pulse could be detected for thirty-six hours before the child's death, but pulsation was noticed in the dorsalis pedis artery, and a bellows murmur was heard at the level of the third rib. On inspecting the preparation, the right side of the heart was found to be very much dilated; the ductus arteriosus and the foramen ovale were patent, the aorta ending in a cul-de-sac.

Dr. JACOBI remarked that this form of malformation of the heart was not rare. Rauchfuss had described it, and Gebhard had collected some thirty cases of congenital occlusion of the aorta in his recent work.

A. G. GERSTER, M. D.,
Secretary.

A STATED meeting was held September 22, 1882, Dr. W. T. KUDLICH in the chair.

PAPILLO-SAROMA OF THE PENIS; ENUCLEATION AND PLASTIC REPAIR.—Dr. A. G. GERSTER presented a case of marked development of papilloma of the penis. The patient was a man thirty-two years of age, whose prepuce was very redundant, and had, in consequence, become the seat of a crop of venereal warts. Rather irritant treatment at the hands of the patient's former medical attendant had caused the growth to spread very rapidly, and it had involved not only the entire prepuce, the larger portion of the surface of the glans, and the sheath of the penis, but even invaded the corpora cavernosa, the process also assuming a sarcomatous character. The crest of the prepuce showed an excoriation of the size of a dime, from the base of which sprang red, cauliflower-like fungosities which bled very readily. The more superficial portions of the neoplasm did not differ from ordinary papillomas in nature, but the deeper structures, forming the base, were anæmic, tough, and fibro-sarcoma-

tous in structure, and adherent to the subjacent tissues. Amputation of the penis had originally been decided upon, with the consent of the patient, but the speaker had finally concluded to attempt an enucleation of the diseased structures, a proceeding that was readily accomplished with the aid of the fingers and scissors, but not without considerable hæmorrhage from the glans and the corpora cavernosa. The latter had forfeited quite a portion of their fibrous investment. The resulting wound surfaces were then freely seared with Paquelin's thermo-cautery, which also promptly controlled the hæmorrhage, and the denuded penis was supplied with a new investment from the integument of the scrotum, which had been slit, along the raphe, as far as its most dependent point. The anterior margins of the scrotal flaps were secured to the stump of the glans, the posterior being brought together along the dorsum of the penis; in all, twenty-five catgut sutures had been applied. Primary union was obtained at all points, excepting to the extent of about 1½ cm. on the dorsum of the penis, where a small tract of the fibrous envelope of the right corpus cavernosum had sloughed. The organ had preserved its erectile capacity, although it had diminished in circumference through the loss of substance from the corpora cavernosa, and its line of projection was equally satisfactory. Dr. Gerster proposed to complete the operation, and to restore to the organ its natural shape, by making a cross incision into the fold of scrotum depending from the body of the penis, and then reuniting the lips by vertical suture.

ARREST OF DEVELOPMENT, GIANT GROWTH, AND LIPOMATOSIS IN AN INFANT.—Dr. A. JACOBI presented a case, occurring in the practice of Dr. H. Moeller, of remarkable arrest of development, coupled with giant growth and the formation of multiple diffuse lipomatous neoplasms in an infant nine months old. The child was one of two surviving out of five, and had weighed thirteen and a half pounds at birth. Cyanosis of the lips was noticeable; there was an extensive cutaneous telangiectatic formation in the right half of the thorax and abdomen; the left foot was of gigantic size, and a curious feature of the same was that the little toe was about six times the size of the great toe. The right knee joint contained no patella, and voluntary superextension of the extremity could be carried to an angle of 240°. The left half of the head being larger than the right, and the left ear being situated about an inch to the rear, gave an apparent wryness to the head. The child had a dull, vacant expression, and had not been known to smile.

CANCER OF THE DUODENUM WITH OCCLUSION OF THE BILIARY DUOD.—Dr. I. ADLER presented a specimen of medullary cancer of the duodenum, with the following history: An old gentleman, seventy-six years of age, had for over thirty years been the subject of an obscure affection of the stomach, of which the most prominent symptom was a gnawing pain, which was only relieved by the regular ingestion of food every two hours. Until three years ago he had enjoyed robust health. A year and a half ago he was taken seriously ill with a chill, followed by a rise of temperature reaching 105°. The following day his temperature was normal, but he had developed cholæmic icterus, which only disappeared to return with greater intensity, until finally the patient's skin had assumed a deep-brown tinge. Both the urine and the stools contained biliary coloring matter in abundance. His morbid appetite had increased, with symptoms of chronic gastritis, so that he craved food every fifteen minutes; still he rapidly lost ground, and finally succumbed to the cholæmic poison. The assumption of obstruction of the ductus choledochus by the pressure of some tumor was shown to be correct by the results of the post-mortem examination. The stomach showed intense catarrh of its lining membrane, with many ulcerations, which accounted for the frequency and violence of the pains experienced during life when the viscus was

empty. Relief was obtained when the ulcers were protected from the action of the gastric juice by the mass of food. The ductus choledochus was completely occluded by the pressure of a tumor, about the size of a walnut, which grasped the duodenum, in the shape of a horse-shoe, and which was eroded on its intestinal surface. The duct showed considerable dilatation behind the point of constriction. On microscopic examination, the tumor was found to be a medullary carcinoma. The glands were not involved.

FILARIA SANGUINIS.—Dr. A. JACOBI showed a sample of chylous urine obtained from a patient twenty-seven years of age, a native of St. Thomas, W. I., who was the subject of filaria sanguinis. At irregular intervals dysuria would occur, followed by the passage of hard, nodular bodies, and subsequently of milky urine. The trouble had disappeared entirely for a considerable period after an attack of scarlatina. The administration of turpentine had caused temporary improvement. On several occasions copious hæmorrhage had taken place from the urinary passages; the specimen under consideration likewise contained blood. His sleep was disturbed; he was in good general condition. The presence of the parasite had been demonstrated and photographic reproductions secured, which, however, seemed to differ somewhat from those represented in the Transactions of the Society for Internal Medicine, of Berlin.

RECURRENT TUBERCULAR DISEASE OF THE WRIST: AMPUTATION. OPERATION FOR PERIPLEURITIC ABSCESS.—Dr. A. G. GERSTER presented a hand, the seat of fungous degeneration of the wrist joint and accessory structures, removed from a tuberculous boy seventeen years of age, who had also had cold abscesses of the sternal region from costal caries.

Dr. J. A. Wyeth had performed resection of the carpal joints by Lister's method of lateral incisions, and had removed the heads of two of the metacarpal bones and all the bones forming the wrist joint, with the exception of the trapezium and os pisiforme. A plaster cast of the extremity had been taken prior to operation, and, when Dr. Gerster took charge of the case, the hand still presented precisely the same conformity as that shown by the model. The whole cavity remaining after the operation had gradually become filled up with flabby granulation tissue, showing here and there points of cheesy degeneration. The sheaths of the flexor tendons being evidently involved, and the boy's general condition admitting of no delay, the useless member was amputated. On the same occasion the carious rib was resected, disclosing an extensive *peripleuritic abscess*, which had dissected up the thickened pleura from the chest wall. The lungs and pleural cavity were intact. The patient was now rapidly recovering.

RESECTION OF THE WRIST JOINT.—Dr. GERSTER also reported the result of a recent resection of the wrist joint for extensive phlegmonous suppuration of the parts. A laborer, thirty-four years of age, had a deep phlegmonous abscess of the hand, which had been poulticed in the customary manner until sinuses had formed which led down, at various points, to the disintegrated and suppurating joint cavities. Langenbeck's method of longitudinal dorsal incision was selected, and the heads of the three middle metacarpal bones, as well as the lower ends of the epiphyses of the bones of the forearm, to the extent of 2.5 cm., and all the bones of the wrist joint, excepting the trapezium and the pisiform, had been removed. Lister dressings were applied, and the extremity was suspended in one of Esnarch's interrupted resection splints. Primary union of the rather extensive wound was secured, excepting at the points of drainage, and by the twelfth day its condition was such as to admit of passive motion. In spite of considerable shortening, the functional result was excellent. The favorable result was due, in a great measure, to

the satisfactory general condition of the patient, who, he regretted to say, had failed to put in an appearance that evening.

Dr. OBERNDORFER made a supplementary report of his case of specific primary lesion on the eyelid as presented at a previous meeting, to the effect that up to date no general constitutional manifestations had been observed—a circumstance he attributed to early mercurial treatment.

DIPHTHERITIC INFECTION THROUGH AN EAR-RING.—Dr. A. JACOBI related the history of a case illustrating the conveyance of contagium of diphtheria by means of an ear-ring. The patient, a little girl, seven years of age, had been removed from home during the course of her sister's fatal illness, and had returned on the day of the funeral. The ear-rings which the deceased child had worn had been superficially cleansed, and given to the sister to wear two days later. Shortly after, one of the ear-ring holes became inflamed, and the next day the lobule of the ear was covered with a white deposit; soon after, a previously existing blistered surface behind the other ear had a diphtheritic membrane formed on it, and a day later diphtheria of the pharynx was developed.

Dr. ADLER recalled a similar case observed by him at Dr. Jacobi's clinic. A child had a nævus which had been destroyed by the actual cautery. She had remained in good health, although in contact with other members of the household who at the time had diphtheria, until the eschar separated, when the fresh surface of the wound thus exposed at once assumed a diphtheritic character; the disease became general, and rapidly ended fatally.

QUININE AS A PREVENTIVE OF TYPHOID FEVER.—Dr. A. MAYER asked whether quinine was considered to possess prophylactic virtues against the contagium of typhoid fever. In a case in point, an epidemic of typhoid which had broken out in a country hotel, six relatives who had remained in attendance on the patient had taken six to eight grains of quinine daily, and had not been affected, whereas one who had neglected to do so had contracted the disease.

Dr. SCHARLAU expressed serious doubts as to the possession of any such properties by quinine, since he had observed cases of typhoid in patients who had previously habitually taken large doses of the drug for malaria.

Dr. JACOBI did not attach any value to inferences deduced from so small a number of observations. The quinine might have had some indirectly beneficial effect as far as its tonic properties were concerned, but, to obtain any disinfecting action upon the blood, the introduction into the system of several drachms daily would be requisite.

A. G. GERSTER, M. D.,
Secretary.

Letters to the Editor.

THE ETHICS OF SENTIMENT AND THE ETHICS OF PRACTICE.

ELBERON, N. J., July 19, 1883.

To the Editor of the New York Medical Journal:

SIR: As illustrating the practical value of the American medical code, let me give a bit of personal experience. I have a family living at a considerable distance from me, in the city, who frequently require attendance in the night, or at times when it is inconvenient for me to respond. Finding that a practitioner (a good many years my junior), in whose professional ability I had confidence, had opened an office in the vicinity, I requested them to send for him for any emergency. I also called on the doctor and explained to him the special case for

which his services were most likely to be required, and the treatment I was in the habit of employing for immediate relief.

Soon after this I noticed that I was no longer called to the family, and, meeting one of them casually, I learned that my friend had been sent for as I requested, and was carrying out a continuous plan of treatment based upon examinations of urine, etc., and that he was promising radical cure where I had obtained only temporary relief, the trouble returning whenever the patient departed from the rules which I had laid down. I have now in my possession a lengthy schedule of diet and medicines which he had had drawn up for the guidance of my patient.

A few days later I had the pleasure of reading in one of the journals a vigorous article from the pen of this same doctor in defense of the Code of Ethics of the American Medical Association, in which he expatiates at considerable length upon the lowering of professional tone which would follow its abandonment. Very truly yours,

A. H. SMITH.

THE FUMES OF SULPHUR IN THE TREATMENT OF CATARRH.

NEW YORK, July 16, 1883.

To the Editor of the New York Medical Journal:

SIR: So much has been said regarding the inhalation of the fumes of burning sulphur as a cure for catarrh, I take the liberty of inquiring through the columns of the journal as to a method of using the same.

Will you please give space to this, with any suggestions which you may think applicable, or permit others so to do?

Yours respectfully,

R.

Miscellany.

THE ST. LOUIS MEDICAL SOCIETY.—We have been asked to publish the following:

On June 23, 1883, Dr. Atwood introduced the following, which was adopted by the St. Louis Medical Society, after some considerable discussion:

Whereas, At the recent session of the American Medical Association, a preamble and resolution were offered for the consideration of said association, purporting to represent the sense of the St. Louis Medical Society upon the propriety of preparing a new code of ethics, or altering and changing the existing code in accordance with the present relations of the profession; and

Whereas, In said preamble the assertion is made that "the code has accomplished all it was designed it should, but at present many of its features are obsolete and not adapted to our wants. The necessity of an early revision is very apparent, is loudly called for in all parts of our land, and can not be repressed much longer. . . . The time has come when the loud and very soon universal call will have to be heeded"; and

Whereas, The St. Louis Medical Society did not instruct "That the committee be authorized to prepare a code of ethics which in their view will meet the wishes of the profession, and submit the same to the meeting of 1884"; therefore,

Resolved, That the St. Louis Medical Society distinctly repudiates the statements contained in said preamble, and again expresses its fealty to the existing code of ethics as a time-honored and most suitable fundamental law of the profession, and specially deprecates any action calculated to reflect upon its loyalty to those principles which have heretofore secured immunity from the machinations of schismatics within or enemies without.

A. H. OHMANN-DUMESNIL, M. D., *Recording Secretary*.

A RENAL FORM OF TYPHOID FEVER.—Dr. Didion has chosen this subject for an inaugural dissertation, and comes to the following conclusions: Typhoid fever produces a renal congestion, which plays an important part in the course of the disease. Albuminuria is almost constant, but generally slight and temporary; when abundant, it is a sign of true nephritis. The renal inflammation is both parenchymatous and interstitial, and produces certain characteristic symptoms, such as

asthenia, stupor, dryness of tongue, œdema of the face and legs, lumbar pains, cutaneous eruptions (pemphigus, eethyma, boils), and an alteration in the urine, which has a reddish color and the odor of boiled bread; in the deposit, red and white blood-corpuscles are found, as well as casts; the urine contains a large quantity of albumin. The diagnosis can easily be arrived at by the above-mentioned symptoms. The termination is often fatal, either from asthenia or uræmia. As to the treatment, Bouchard recommends carbolic acid and the salicylates, Polli the sulphites, Klebs the benzoate of potash. Leeches, mustard poultices, and cupping in the lumbar region are useful; but blisters, even with the addition of camphor, must be avoided. In certain cases, the disappearance of the symptoms is accompanied by abundant diuresis, which ought, therefore, to be favored if possible; but all diuretics are not equally good: those which possess irritating properties must be avoided. The best in these cases is milk, pure, or mixed with water. Whatever may be the way in which it acts on the kidneys, it is always well borne, and its action is double; it increases the secretion of urine, and hastens the elimination of toxic principles, without producing any irritation, even in the most acutely inflamed kidney. Subcutaneous injection of pilocarpine might perhaps be useful; in one case, when the skin was dry and burning hot, Dr. Didion injected twice daily one sixth of a grain of pilocarpine, and under its influence the skin became moist, and abundant sweat was produced; the tongue also was less dry than before; the temperature fell in two days from 105.8° to 98.6° F.; but three days later the patient died, after the temperature had once again reached 104° F. New investigations are necessary before we can arrive at definite conclusions. As for the cold baths, Gubler thinks that they are contraindicated in case of nephritis, but Libermann considers their use as surely beneficial in spite of it. Several patients who had been subjected to that treatment did not complain of any inconvenience, and cold lotions rapidly applied to the trunk and limbs with a sponge seem to relieve the patient, lower the temperature, and re-establish the functions of the skin. All these advantages must be weighed against the danger of a renal congestion; but further experience alone can show which treatment is most advantageous.—*British Medical Journal*.

ARMY INTELLIGENCE.—*Official List of Changes of Officers of the Medical Department, United States Army, from July 14, 1883, to July 21, 1883.*—MAGRUDER, D. L., Lieutenant-Colonel and Surgeon, Medical Director headquarters, Department of the Missouri. Granted leave of absence for one month, with permission to apply for an extension of one month. S. O. 145, Department of the Missouri, July 12, 1883. —ELBREY, FREDERICK W., Captain and Assistant Surgeon. The leave of absence granted on surgeon's certificate of disability by S. O. 26, A. G. O., January 31, 1883, further extended six months on surgeon's certificate of disability. S. O. 162, A. G. O., July 16, 1883. —POWELL, JUNIUS L., Captain and Assistant Surgeon. Assigned to duty at Fort Columbus, N. Y. H. S. O. 130, Department of the East, July 18, 1883. —RICHARD, CHARLES, First Lieutenant and Assistant Surgeon. Assigned to duty at Fort Adams, Newport, R. I. S. O. 130, Department of the East, July 18, 1883.

NAVAL INTELLIGENCE.—*Official List of Changes in the Medical Corps of the Navy for the week ending July 21, 1883.*—Dr. Horace Brown Scott, appointed an Assistant Surgeon. —Assistant Surgeons Charles W. Rush, Oliver Diehl, J. H. Bryan, and J. D. Galewood, promoted to Passed Assistant Surgeons. —Surgeon C. H. White and Passed Assistant Surgeon A. C. Heffinger, detached from the Lackawanna, the former placed on waiting orders, and the latter granted three months' leave. —Surgeon T. Woolverton, detached from the Naval Hospital, Philadelphia, on the 31st of July, and granted leave of absence for one year, with permission to leave the United States.

SOCIETY MEETINGS FOR THE COMING WEEK.—*Thursday, August 2d*: Society of Physicians of the Village of Canandaigua, N. Y.; Medical Society of the County of Ocean, N. J. (Tom's River).

CORRIGENDA.—The following corrections should be made in our issue of July 14th: In Dr. Skene's lecture, p. 33, first column, sixth line from the bottom, for "womb," read *wound*; in Dr. Blodgett's article, p. 35, second column, twentieth and nineteenth lines from the bottom, for "costal cartilages," read *costal dislocations*.

Lectures and Addresses.

CLINICAL LECTURES ON DISEASES OF THE SKIN.

DELIVERED AT THE NEW YORK HOSPITAL,

By L. DUNCAN BULKLEY, M. D.,

PHYSICIAN TO THE OUT-PATIENT DEPARTMENT—CLASS OF VENEREAL AND
SKIN DISEASES.

LECTURE I.

Psoriasis Treated with Chrysophanic Acid.—Eczema Rubrum.
—*Eczema Rubrum with Varicose Veins.—Recurrent Eczema.*
—*General Diffuse Papular Syphilide.*

GENTLEMEN: At the beginning of each lecture we will show the patients, and, if time allows, I wish at the close to spend twenty minutes or half an hour in didactic review of what we have seen. Our clinic depends upon the material sent to us and upon our out-door service here, so that I can not always command the cases in the order in which I wish to present the subject. I shall therefore have to take the cases in a desultory manner, and afterward group them together. I will first show you some simple cases before we commence the study of the more obscure ones.

CASE I. PSORIASIS TREATED WITH CHRYSOPHANIC ACID. —This case is very interesting, from the fact that, without our intending it, we have had quite a remarkable improvement in the eruption from a treatment which has been advised, but which has not been frequently employed—namely, the internal use of copaiba. The patient came here first on account of a gonorrhœa, and not for his psoriasis, which he had had for twelve years, and was put on the treatment for gonorrhœa—on what is known as the Lafayette mixture—a mixture containing an alkali and a little spirits of nitre. When he first came, on April 12th, the psoriasis was in full bloom, very much more marked than now. He was given the mixture of copaiba, but with no local treatment, and as his gonorrhœa diminished his psoriasis greatly improved, so that now his eruption is not of half or quarter its former extent. He says there are no new spots, and, as you see, the eruption is fading. His name is J. B., aged twenty-four. He has had psoriasis for twelve years, with occasional improvement, followed by relapses or increase of the eruption from time to time, it having never entirely left him since its first appearance. What I show you now is not the eruption of psoriasis as you are apt to see it; it has decidedly faded, some of the spots have disappeared, and many are much broken into. On the elbow you will still find the white, slightly adherent, imbricated scales, which very readily come off with light scraping; they are seated on a red base, which, as always, is perfectly distinct and sharply defined, and not with the indefinite outline commonly seen in eczematous patches. On scraping off the scales lightly we soon come to a membranous pellicle, which is adherent, and, if the scraping is carried still further, this comes off and is followed by the appearance of a drop of blood. The eruption, as you see, consists of dusky-red spots, of a size varying

from that of a minute pin-head to almost any size, always sharply defined, tending to cover themselves with a white scale, which, on being scraped off, leaves a red base, which bleeds very readily. Remember that the separate spots of psoriasis always appear first as small points, gradually enlarging, and that even when seen as patches of large diameter they have always thus begun; in some localities you may observe the mode of disappearance of the eruption, it gradually fading out, the scales ceasing to form, and finally the redness itself vanishing. We see on the legs very much less eruption than is usually seen on these parts; as a rule, in psoriasis, the legs have more of the eruption proportionately than the body; almost always the patches are larger on the lower extremity, more scaly, and of a darker hue.

Differential Diagnosis.—Why do we speak so confidently of its being psoriasis, and state that it is absolutely impossible that it could be anything else? The reasons are found in the character of the lesions, taken in conjunction with the history of the duration of the eruption. There are only four eruptions which could with the slightest reason be supposed to be the one before us; these are: a squamous syphilitic eruption, an eczema, a ringworm, and psoriasis. First, of syphilis: this man has had the eruption for twelve years, with varying severity, and this eliminates syphilis absolutely, as such a general syphilitic eruption never continues that number of years. You may have an ulcerative syphilide for five or more years, but never an acute, distinct form of this kind. In the next place, the syphilide would be on the flexor and extensor aspects alike, while in psoriasis the extensor surfaces are always the seat of preference. In the general large papular syphilitic eruption you could never have any such extensive patches of disease as are seen on this man's legs.

Second, in regard to any possible form of eczema which might be mistaken for the present eruption. Eczema seldom, if ever, presents so many separate points of eruption as are seen here; and it may be said that it never exhibits so many of such small size and so sharply defined. Upon some portions of the body psoriasis may resemble eczema, and you see the characteristics it very commonly may take on on the lower extremities—namely, the patches are larger, more dusky-red, and of more undefined outline, often more resembling an eczema of the lower extremity. It would be difficult, but not impossible, to make the diagnosis from the eruption on the lip alone.

In certain points this eruption might be thought to resemble ringworm, but yet you would certainly not have such a vast expanse affected with the parasitic disease, and an examination of the scales by the microscope would show the parasite in the latter. The individual spots present differences from those of body ringworm in the pearly character of their scales, the absence of a clearing in the center, and the rather livid redness of the base of the psoriatic spots. We then make the differential diagnosis from syphilis, eczema, psoriasis, and ringworm; and, recognizing the lesions of psoriasis, we conclude with certainty as to its nature.

This patient continued the use of the balsam of copaiba

until the eruption was a good deal faded and broken up, and some weeks ago he was put upon another treatment which has recently been advocated. He has been under the internal use of chrysophanic acid, which has been reported on favorably by several observers, some claiming brilliant results from it. I have several patients under this treatment, but am not ready yet to speak definitely concerning it. He began with a quarter of a grain, in a powder with sugar of milk, taken three times a day directly after eating; and a week ago I doubled the doses. It is best always to begin with a quarter of a grain, and after a few days give half a grain, and then a grain, until some effect is produced on the stomach or bowels. Some patients are said to have taken up to four or five grains several times daily. When you get to five grains there is sure to be purging and vomiting. He is under this treatment, and has not had any effect from it as yet; but we shall continue it for some time to come, and I propose to push this treatment in as large a number of cases as possible. I wish to give you at the present time the diagnosis and treatment in these cases as we see them, and the theory of treatment I will give you later in the course.

CASE II. ECZEMA RUBRUM.—I bring you this woman to show you a leg which is scaly. It is a case of eczema rubrum of the left leg. She is forty-three years of age, attends to her own household work, being therefore more or less constantly on her feet, and has had an eruption only on this leg. I merely want to show you that, although an eruption is scaly, although it is red, it may not be psoriasis. No case of eczema ever becomes psoriasis. The patient states that she had erysipelas eleven years ago, and that it broke out again two years ago and settled in her back. You will see a great many cases which are called erysipelas, and chronic erysipelas, of the face, etc. We all know there is no chronic erysipelas. It may be chronic by recurrence, but not such an affair as this. This is chronic eczema, which never presents numerous well-defined, sharp patches. See how uneven the edge is, and how it shades off into unhealthy skin; you get a certain amount of erythematous skin, you get it on one half of the body, or, if on the whole body, in continuous patches. This is erythema rubrum, and is one of the cases which, of all others, are perfectly treated with the rubber bandage. I am sorry I can not put it on to-day, to let you see how to do it. I am afraid this patient does not put it on tight enough. If this leg were exposed to the open air it would crust over, and if closed up at night there would be a surface that would exude moisture. Leave it alone and exposed to the air and that moisture tends to dry. If she had left it alone, untreated, and had scratched it, it would have a large crust; if treated with the rubber bandage there would be no crust upon it, but the scales would come off on removal of the bandage. She states that she left off the bandage for over a year, and that the leg was in as good condition as this until August; but in August, from over-fatigue, she had the eruption develop in spite of the bandage. The tongue is quite indented, and considerably cut; her bowels act every day; her water is very much colored, and stains the vessel considerably. She is taking some medicine, but I do

not know what it is. We expected her to say the water was stained. Most of the cases of eczema of the leg are connected with highly colored urine, with a heavy sediment of lime, or some other deposit, from imperfect elimination by the kidneys. It always recurs from over-fatigue or over-exertion.

Differential Diagnosis.—There is nothing like this disease at all, except psoriasis, and that does not come in such a profuse form.

With regard to *local treatment*, the bandage is the great thing; it is an invaluable addition, and she would hardly know what to do without it. We shall later on have an opportunity to see it put on, and then I will speak of the mode of treatment. For *internal treatment* you generally give diuretics, a cathartic, and usually some tonic with all.

I pass to you some plates of eczema, and one of these is a plate of Dr. Fox's, of eczema of one leg, the other leg having a tubing on it. I do not think that is employed now, but that Dr. Fox has himself discarded it. This form of eczema is usually attended with varicose veins, but in this case I find none.

CASE III. ECZEMA RUBRUM, WITH VARICOSE VEINS.—Mrs. Deon, aged fifty-two. She has had a milk leg—that is, the left leg was affected twenty-two years ago, and again nine years ago. About December 1, 1880, an ulcer made its appearance on the left leg from which there are large scars, and an eruption shortly appeared after it, and gradually extended up the leg, involving the greater part of the leg when first seen, January 1, 1881. I show you these patients that come back to us, as they are instructive. We get them well to a certain extent; they leave, and there is a relapse. Many of the eruptions have a predisposition to return. She first came to see us January 26, 1881, and was here under treatment for two or three months. She got well under the rubber bandage, then she disappeared, and we did not see her again until September, 1882—a year and a half, which is, of course, a good immunity for a person who is on her feet all the time. The trouble came back in September, and it began on the 22d, four days before she was seen. Here we have the same lesion as in the former case, accompanied with varicose veins, with very considerable varicosities of the feet. We note here an erythematous condition, which disappears entirely on pressure and readily returns on taking away my hand. You notice the œdema of all the parts. Most cases of eczema of the leg are associated with œdema, which is not necessarily owing to kidney causes. In this instance it is secondary to the milk leg, or phlegmasia, she had first twelve years ago, and again nine years afterward.

I think, if we want to have our patients remain cured, we must require them to wear the bandage continually, just as persons with certain deformities of the body require the continual use of a bandage or truss; for, as a consequence of leaving off the bandage, we get an affair which seems like a purely local disease, but, in my judgment, is not a local disease. You see some persons with varicose veins who do not have the eruption at all, while others, without having varicose veins, have the eruption. This is, I believe, wholly constitutional. We put her upon the treatment

which is commonly prescribed here, and you will hear frequently of it; but I hope you will not consider it routine practice—that is, the diuretic treatment. She is taking the acetate of potassium; it relieves the congestion of the skin, and certainly removes the disease. She is now taking thirty grains three times a day, in a little rhubarb-and-soda mixture, which is mainly used. Locally she has applied an ointment of salicylic acid and balsam of Peru. I merely mention that ointment, but can not speak further about it now; it is composed of about half a drachm of salicylic acid and a drachm of balsam of Peru to the ounce.

CASE IV. RECURRENT ECZEMA.—I now show you a case of recurring eczema in a child whom I showed you last year—a child who, when you saw her then, had an eczema all over the neck. She remained entirely well until this fall. We saw her here last March, with a history that when six months old she had an eruption lasting until eighteen months ago—I am reading the first record of March, 1881—and this eruption had been on the head for twelve months when we saw her. The head was the seat of a squamous eruption, and all the upper part of the neck, back, and chest was likewise affected with eczema rubrum. There is some moisture there now. She is over four years old, and, you see, is an exceedingly small child for her age. When you saw her last year the entire neck was the seat of a moist, exuding eruption. The head was entirely crusted over, and the child was suffering very considerably. There were enlarged glands in the neck, indicating a low vitality and a scrofulous condition. What she shows to-day is a small amount of scaling, which I wish you to look at closely. I want you also to see this eczema of the eyelids in a child, because such patients are taken to oculists and treated with blue-stone for years, while, if treated as eczema, they would get perfectly well. You see here a swelling of the lids which would not be here if it were not for this eczematous spot, and you find the remains of eczema on the lips. That, of course, may vary to any extent; there may be a thickened eyelid, and when you find it in eczematous subjects you can be pretty sure it can not be cured without proper constitutional treatment. There is a slightly reddened condition of the eyelids—a puffiness of the whole region of the Meibomian glands. Now, here we still see a certain amount of redness, and a certain amount of erythematous thickening, as the remains of the eczema. I have not seen her for a long time.

Eczema of the eyelids is treated frequently with stimulating solutions—with nitrate of silver, blue-stone, etc., without effect, until the proper treatment for eczema is used. The erythematous condition of the neck is hardly worth seeing. She is better than she was a year or so ago. It is a little over a year since the child had any treatment at all. The scalp was crusted over and the hair matted down, and there was some eruption on the upper lip and on the arms when she came here, September 20th. She was given the syrup of the iodide of iron, a teaspoonful three times a day, and locally she was to use the ointment which you will see continually used, namely, the tar-and-zinc ointment. It is composed of half a drachm of oxide of zinc, two drachms of tar, and six drachms of simple ointment, or rose

ointment. That treatment has been continued from the first; she has had nothing but the iodide of iron and the tar-and-zinc ointment. I do not generally use the treatment with the iodide of iron in eczema; that was given in my absence. Although I do not wish to reflect any discredit upon this treatment, yet I do not use it; I do not know why, but I have not been as well satisfied with it as with other treatment. I shall put the child on a little arsenic and ammonia, or the citrate of iron, or the citrate of potassium and sweet wine of iron, made with Malaga wine, under which, I think, such patients improve faster than under the iodides.

CASE V. GENERAL DIFFUSE PAPULAR SYPHILIDE.—I show you quite a different eruption now, gentlemen, in a case of specific disease. I will say, once for all, that I consider it a good deal better to use the term specific disease, and I only use it for one disease—syphilis. Whenever I use the word specific it refers to that, and that alone; it saves me explanation and uncertainty. It is a case of early general diffuse, or general scattered, papular eruption from syphilis. The patient is a widow. She had one child, who died soon after birth. She has had the present eruption for the past three months. When seen a week ago, all the body, face, hands, neck, arms, and legs were covered with the grouped papular syphilide, and she has mucous patches in the mouth.

I show you the case, gentlemen, for you to compare with the first case I showed you, the case of psoriasis, which in appearance this resembles to a slight degree. Here is a moist eruption which somewhat resembles psoriasis, but the scales of specific disease are always slight as compared with psoriasis. Specific disease does not tend to cover itself with scales, except in the tubercular form. This is a little dark, a little large, and a little too prominent to be confounded with psoriasis. Here is a very interesting point: you find here what is termed psoriasis of the hand, or what is sometimes called psoriasis palmaris syphilitica. Now, in any case of psoriasis you will not find spots like that developed in the palms of the hand. If there is doubt in your mind, *there* is a point which would argue nine out of ten times in favor of its being specific disease. This is a general, large, specific papulide. This woman's primary lesion must have attacked her within six months. There is no eruption on the soles of the feet. There is sometimes seen a little circular grouping of the lesions, but it does not happen to occur in this case; when it does occur it is perfectly pathognomonic. Here is the general large papular syphilide that might have been covered with more scales, and might in certain other cases represent psoriasis. Here is a wax model of the lesion; they call it *syphilide palmaire*, but there is no propriety in calling it that. Now, you notice I have made this diagnosis without a word from her. I do not care whether she had the primary lesion or not; there are characteristics which are absolutely positive. You will see the spots are solid, and are erythematous, and disappear on pressure; they are not stains; they may be acute and new, and there are also some stains left from the former lesion. There is some little analgesia, or loss of sensitiveness to pain, during the early acutely developed phases of

syphilis. It is more common in women than in men. I have patients on this platform into whom I could stick a pin without their knowing it. There is entire loss of sensitiveness. We have here a general diffuse papular syphilide on the face, as well as on the body, and I should suspect the face if there were none on the hands. There are features here which might be mistaken for those of acne, and might be something else; but one point would lead us to diagnosticate syphilis, and that is the scattered appearance which the lesions present—I mean covering the whole face. You see an acne group, but never see an acne on the lip in that way.

She is under the "mixed treatment." I believe in giving her a slight amount of hydrargyrum early in the disease, and I believe occasionally a little iodide added to it will help the disappearance of the eruption. She is taking a mixture with a little iodide in it, because it does hasten it, in my judgment. She has been under the treatment only a week or ten days, and the eruption is getting somewhat less than it was.

Original Communications.

TRICHINIASIS

IN ITS RELATION TO

PUBLIC HEALTH AND NATIONAL ECONOMY,

By FRANK S. BILLINGS, VET. SURG.,

BOSTON.

Third Article.

AMERICAN HOGS MORE INFECTED WITH TRICHINÆ THAN EUROPEAN.

COMPARISON of the statistics here given demonstrates, beyond all question, that American hogs are more liable to trichiniasis than those of Germany.

The hogs which have been examined here have all been Western (except those examined at New Orleans, which are reported to be somewhat Southern [?]), yet no one well acquainted with the circumstances would assert that the hygienic conditions under which our Western hogs are raised are not superior to those of the famed "home-fed porkers" of the small New England farmer—raised, as they almost always are, in dark, loathsome, poorly ventilated pens; only too frequently under stables, with the house-vaults and sink-drains emptying into them.

I should mention that it has been, thus far, impossible for me to make any valuable examination of Massachusetts hogs, there being no disposition upon the part of State or local authorities to aid in such a matter, and, consequently, no material could be obtained.

As to German hogs, whoever has been upon a tour of observation through the agricultural districts of that country must have been struck most forcibly with the absurd non-hygienic conditions under which, not only hogs, but all domestic animals are, in general, raised, in comparison with those of our own country, especially of the West.

In making examinations of hogs with reference to trac-

ing them back to the raiser, an important question will be, whether the greatest percentage of trichiniasis is found among the hogs fed at the large distilleries, or under the apparently more favorable open-air feeding of the farmer; or, again, as many farmers pasture their hogs before the corn is ready for fattening, is it among such that more trichiniasis is to be found than those kept constantly penned? It would also be of interest to know if the semi-wild swine of our Southern States, as well as the peccaries of Central America, are infected. As, according to Dr. Payne, "Southern hogs are free from trichinæ," it is imperatively demanded that a more exacting examination of the same, by a commission, should be made, and also that our various State authorities be induced to have a correct examination of hogs, bred and raised in the respective States, for, so far as we know, neither "Southern hogs" nor those of any country or section are really "free from trichinæ."

The English have examined a *very few American hogs for trichinæ*, but we have no authentic report of any examination of British or Irish hogs, any more than we have of those of France or any other European country, aside from Germany.

It may not be without value, and certainly is of interest, to know how the question of trichinæ in American pork is viewed by men of authority in Germany. For this purpose I beg to offer a very free translation of Bollinger's* views (formerly Pathologist of the Veterinary School at Munich).

Writing upon "Trichinæ in American Pork," in a review of an article by Roeper upon the same subject, he says: The author (R.) has made numerous examinations of the same, in order to contradict the opinion held in America (by whom?) that the "trichinæ of American pork are an entirely different species from those found in the swine of Germany, and are harmless"; also to contradict the opinion "that the peculiar process which 'American sugar-cured hams' are passed through is sufficient to render the parasites harmless."

He found both of these assertions to be without foundation. The "curing" process does not, in all cases, kill the trichinæ in the deeper seated parts of a ham.

The following absolutely erroneous explanation is given for the greater percentage of trichinæ in our hogs over those of Germany:

"The swine that are brought to the large American slaughter-houses are allowed to feed upon the refuse from those previously slaughtered, and in this way have time and opportunity to infect themselves. Such infected swine are themselves slaughtered, and again give rise to infection of those remaining in the pens or those which have arrived later. Accordingly, this evil must go on constantly extending, and all persons must be earnestly warned against the consumption of raw American pork."

Bollinger certainly betrays his utter ignorance of the true conditions at any large American packing-house. *The refuse from slaughtered swine is never fed to other swine that may be in the pens at such places. It is sold for fertilizing purposes to manufacturers of such material, or made into such by the packers themselves.*

* "Deutsche Zeitschrift f. Tiermedizin," vol. i, p. 220.

According to the best German authorities, *it requires from five to seven days for newly introduced trichinæ to produce young.*

No "large American packing-house" keeps a lot of swine on hand for from five to seven days, for they kill them as soon after arrival as possible. They could not make money, or handle the numbers they do, did they do otherwise. It would be absolutely impossible to kill from 1,000 to 3,000 swine a day were they to keep them on hand; no packing-house has pen-room enough to keep them.

While the remarks of Bollinger are so erroneous with reference to the system of procedure at our packing-houses, *they are absolutely true, not only of many small slaughter-houses, but still more of home-killed hogs, among our farmers.* These hogs, however, find ready consumption here, few, if any, being sent to Europe, some being sold in our markets as "home-fed pork" by persons who "know all about the man who raised them."

Here let me say there is a prejudice, at least here in Boston, in favor of this "home-fed pork" against Western; my opinion is, that, so far as cleanliness of feeding goes, the balance is strongly in favor of the Western hog, trichinous or not, as compared with that of New England.

Bollinger says further: "*The refuse from slaughtered swine at such large establishments is sold to the neighboring farmers as food to fatten their swine upon, and thus helps to swell the percentage of trichinosis in American pork.*" *

Unconditionally false!

His report ends thus: "*It is therefore right to warn the people against the consumption of American pork,*" unless it has been submitted to the most stringent microscopic examination.

We would say this measure *is equally applicable to all pork, European or American.*

THE DISEASE IN SWINE.

Numerous feeding experiments with trichinous meat were made at the Berlin school (the results being given in an able paper by Professor Mueller).

It has been proved that the consumption of such meat by swine with the sequential development of embryos in their intestines, and their migration and lodgement in the muscles, may, indeed, cause disease, but that the phenomena of the same prove neither that constancy nor distinctness of character which will admit of diagnosis of the disease during life.

All the swine thus fed became ill within a few days after consuming the meat. The following were the most constant phenomena presented to observation: Diarrhœa, but not constant, being frequently interrupted by the passage of solid fœces. Sometimes it failed altogether. Phenomena indicating abdominal pains were frequently observed, such as uneasiness, burying themselves in straw, etc.

"These phenomena, either singly or collectively, may be observed in swine, entirely aside from any anticipatory trichina infection. They simply indicate the action of some irritant within the intestinal canal, and in this case (where the trichinæ had been fed), if swine die or are killed, we

should find the same pathological phenomena as in an intestinal catarrh of similar degree of intensity, plus trichinæ, which could only be discovered by the microscope.

"With the gradual cessation of the migration by the parasites, the abdominal symptoms become less marked, and finally disappear, to be followed by those indicating some disturbance of the motor functions. If the latter do not lead to death, they, in their turn, gradually cease with the capsulation of the parasites."

Although the presence of trichinæ within the intestines causes diarrhœa, yet, in these animals, it was impossible to find any embryos in their fœces.

This by no means excludes the possibility of finding them in other cases; their passage away with the fœces must be, in a measure, retarded by their being buried in the profuse layer of mucus which is the product of the irritation caused by them. In none of these swine was it possible to discover anything resembling the œdema which is observed in man under the same circumstances, and which serves essentially to strengthen the diagnosis of the disease.

Leisering,* of Dresden, has also made numerous experiments upon swine with trichinæ. He says: "One can not speak of a 'trichina disease' among swine which is characterized by any distinct and pathognomonic phenomena. In this regard, trichinæ deport themselves similarly to the cysticercus—measles."

Gerlach † says: "About two fifths of the hogs fed with infected meat were either not affected thereby, or but very slightly; the remaining three fifths were manifestly sick."

"The slight cases presented nothing of diagnostic value, while in the severe ones the symptoms were not of such a character as to indicate the true nature of the disease."

"After an attack of trichiniasis, the hog becomes again as well as ever, and can be fattened as well as one that has not been infected."

"In cases which apparently pass over symptomless, or when the infected animal betrays but slight constitutional disturbances, the infection is still of sufficient degree to make the flesh a dangerous article of food."

"Hogs are more susceptible to trichinæ invasion at an early age, old ones being more difficult to infect."

"Death results in over one half of the extremely severe cases."

Trichinæ can only gain admittance to an organism and cause infection by means of the mouth and digestive canal.

Notwithstanding the apparent negation of the Berlin observations, we have the very best authority for affirming that *intestinal and embryo trichinæ leave the autositic organism with the fœces.*

Leuckart says: "As the sexually matured trichinæ accumulate in great numbers in the intestines of an autosite, and as the irritation caused by them leads to the development of a more or less severe diarrhœa, it is evident that the young must be taken up and pass off with the fœces, and not only free embryos, but also pregnant females, are subject to this removal, which has been sufficiently attested

* Taken from the "Magazin, f. d. gesammte Thierheilkunde" vol. xxi, p. 6.

* "Berichte üb. d. Vet.-Wesen im Sachsen," 1862, p. 118.

† Die Trichinen.

by my own observations and those of Vogel, Kuhn, Gerlach, and others. This form of migration, under favorable circumstances, also contributes to the further distribution of trichinæ. Heubner and Gerlach quote cases *where they intentionally caused trichiniasis among young swine* (the non-trichinous condition of which they at first assured themselves of) *by causing them to live in the same pens with such as were known to be infected.* Such embryos and pregnant females become mixed with the manure and bedding of the hog-pens, or pollute the grass and ground, and may be taken up by other swine, or even by the original autosites, as they root over such material, and consume whatever they may find to their liking."

In the foregoing we have a course of invasion in which swine are the only factors. Is there no other factor or factors playing an active part in trichina invasion? It has been previously mentioned that wild swine have been found trichinous, also cats, dogs, foxes, and other animals; but of all autosites which lodge trichinæ (aside from swine and man), *the rat enjoys the most sensational reputation from the entirely hypothetical ætiological connection between the trichiniasis of rats and that of swine. It is my firm conviction that, while a trichinous rat, alive or dead, may give occasional rise to the infection of one or more hogs, porcine trichiniasis is due to some other, at present unknown, intermediate factor.*

Leisering appears to have been the author of the rat-infection hypothesis. There is no rational reason why rats should not be trichinotic as well as swine, or even more so; they have much in common in their habits of life, and it will be found, by exact investigation, that the facts go to prove that trichinous pork (which does not exclude an outside, common source of infection) is more frequently the cause of rat trichiniasis than that rats give occasion to the disease in pigs.

The following statistics of rat-infection are all I have been able to collect:

Of 704 rats from different parts of Germany, 59 were found trichinous, 8.3 per cent.; of 208 rats from German knackers, 46 trichinous, 22 per cent.; of 224 rats from German slaughter-house, 12 trichinous, 6 per cent.; of 272 rats from other places, 1 trichinous, 0.3 per cent.; of 326 rats from other places, 39 trichinous, 11 per cent.

Of fifty-one rats caught at the knacker's establishment at Speetacle Island, Boston Harbor, thirty-nine were trichinous.

The proprietors of this place kindly gave me opportunity to examine twenty-eight hogs which had been kept and fattened at the island.

None were trichinous!

These hogs received no city swill of any kind. What flesh they received had been subjected to heat enough to extract the fats; otherwise, they were fed upon nothing but corn-meal.

Forty rats caught for me at the largest packing-house near Boston were all trichinous.

Of sixty rats caught for me at different stables in the city of Boston, where no pigs were or had been kept, *but six contained trichinæ.*

Dr. Payne examined six rats from a New Orleans slaughter-house, and found them free from trichinæ.

The results of the examinations of American pork, as well as rats, lead to the following conclusions:

1. Both show a higher degree of trichiniasis than those of any other country from which we have any statistics.

2. The fact of the great number of trichina-infected rats, according to my idea, gives support to the greater degree of infection among our hogs.

3. I am not yet ready to accept Dr. Payne's "trichina-free" districts; hence I see the necessity of the most thorough examination of hogs within the limits of the States or sections of the country where they are raised and fattened, not by single men, but by commissions of five, to conduct the whole, no matter what the labor or expense may be.

4. The United States Government must "face the music"; it can not sit still and quietly deny the trichiniasis of our hogs. The facts are against us. Proof of an unquestionable sort is necessary.

5. If the fact becomes generally proved of a greater percentage of trichiniasis here than anywhere else, we must seek the cause. The *cause*—the real one—once found, prevention can be made easy.

PREVENTION OF TRICHINIASIS IN SWINE.

1. State boards of health are necessary in every State.

2. Local abattoirs, where all cattle and hogs used for domestic consumption should be kept, with suitable inspection, must become the law.

3. Continued examinations of swine as well as rats in the respective States, and the prevention of all refuse from slaughtered swine ever being thrown into the pig-pen or barn-cellar.

4. *All* sick swine, from whatever cause, should be peremptorily isolated from healthy ones, under the supervision of a competent veterinary inspector.

5. All swine suffering from diarrhœa should be isolated, and singly. The greatest care should be taken in cleansing the pens of such swine from all bedding and fæcal masses.

(a) The fæces from such swine should be subjected to microscopic examination.

(b) On cessation of the diarrhœa, whether motor disturbances appear or not, the muscles and tongues of such swine should be "harpooned," and the specimens thus obtained subjected to a careful microscopic examination.

6. Hogs in which trichinæ have been found should be branded "Trichinous"; they should be fattened singly, and should never be allowed to be sold for human consumption. Their *lard* could be tried out, however, to make "lard-oil."

7. Hog-pens should have asphalt floors, and be kept scrupulously clean. The turning of compost into the hog-pens, or allowing water-closet, sink or house-drains to enter them, should be absolutely forbidden by law.

THE MICROSCOPIC EXAMINATION OF PORK.

Numerous elaborate essays have been written upon this subject, but the entire process is so easy and simple that such extended labor can well be looked upon as useless.

We have seen that natural causes offer us the point for the best and most available examination in the pillars of

the diaphragm. *No trichinæ there, none anywhere, may be looked upon as law.*

The remnants of them are always to be found, *as two small stumps of muscle—flesh—immediately below the kidneys* (in the dressed hog when hung up to cool out), or in front of them, when the hog is laid down.



FIG. 1.—FRESH TRICHINOUS INVASION.

A power of 50 to 75 diameters is sufficient for a correct examination. The necessary paraphernalia are: A few glass slides and *strong covering glasses, of twice the size and thickness of those ordinarily used*, a pair of curved seissors, and two teasing needles.

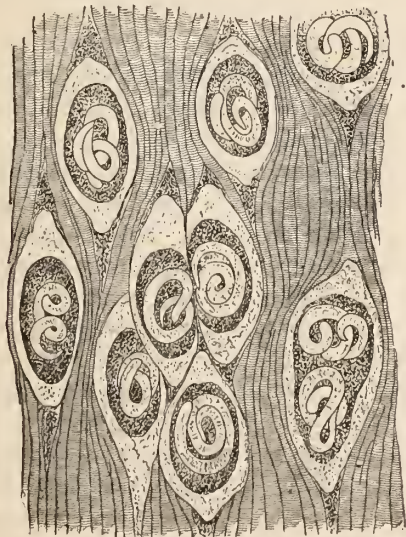


FIG. 2.—NORMAL ENCAPSULED TRICHINÆ. (Leuckart.)

The *modus operandi* is as follows:

If at all dried, cut into the body of your specimen with the seissors, and then cut any number of small pieces, lengthwise to the course of the fibers; place them, two or three at a time, upon the object glasses, a little distance apart, then place the covering glass upon them, and gently

thin them out with pressure and a slight backward and forward sliding motion of the covering glass.

In the face of all contrary assertions, this will give a better chance of discovering the trichinæ in fresh meat than by teasing out, or other method.

It is not necessary to cleanse the glasses for each specimen to be examined.

To determine if the parasites still live, place the object glass over heat for a second or so, and then place it under the microscope, and they will be seen to move in their capsules.

Salted pork is best examined by cutting it into suitably thin pieces and placing them in warm water for a few moments.

DOUBTFUL OBJECTS WHICH MAY BE SEEN IN THE EXAMINATION FOR TRICHINÆ.

It not unfrequently happens that the capsules become abnormally thickened and the parasites dead within them.

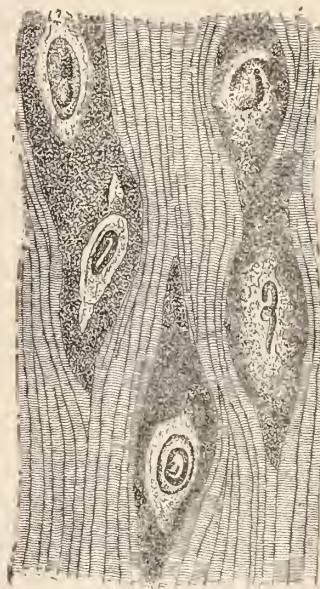


FIG. 3.—TRICHINA CAPSULES CHANGED PATHOLOGICALLY. TRICHINÆ DEAD (Leuckart.)

In other cases calcification takes place to such a degree as to entirely change the appearance of both capsule and

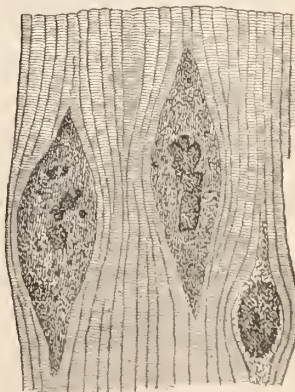


FIG. 4.—ENCAPSULED CONCRETIONS WITH DEAD TRICHINÆ. (Leuckart.)

contents. Treatment of such capsules with hydrochloric acid will render the diagnosis easier.

Again, cysticeri—measles—perish and become calcified; these objects are larger than trichina capsules, and are often filled with a caseous mass.



FIG. 5.—TRICHINA CAPSULES, WITH CALCIFIED AND DISINTEGRATED TRICHINÆ. (Leuckart.)

The sacs of Rainey, or, as they are also termed, "psorospermia," are elongated, granulous bodies, like trichinæ, intra-sarcolemmatous. The true nature of these bodies is still an open question, as well as their pathological importance. By trichinæ, the striation of the fiber is entirely destroyed within the capsule—that is, it is not to be seen alongside of the parasite, while in cases of psorospermia it is retained and to be seen at the side of the object, and continuing directly from its extremities.

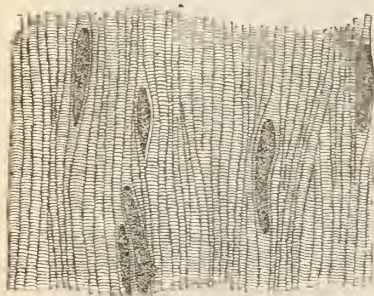


FIG. 6.—PSOROSPERMS IN A HOG'S MUSCLE. (Leuckart.)

Bruch, Virchow, and Leuckart have described peculiar roundish or oval objects of a whitish color and variable dimensions, which are sometimes to be seen in the flesh of hams, and which have been found to be made up of needle-like crystals. They fill the fiber to a varying degree without otherwise disturbing its contents, and disappear upon treatment with hydrochloric acid, the striation of the cell again coming to view.

PROF. ERCOLANI'S RECENT INVESTIGATIONS

OF THE

ANATOMY OF THE PLACENTA.

BEING A REVIEW OF THREE LETTERS ADDRESSED BY HIM TO PROFESSOR ALBERT KÖLLIKER.

BY HENRY O. MARCY, M. D.,

BOSTON.

(Concluded from page 91.)

In the second letter the causes are examined by which the anatomical school of Kölliker was led astray in its decisions concerning the intimate structure of the placenta in woman, which, as has been said, is identical with that of the superior simiæ. The origin of the mistakes with regard to woman is twofold. Some of them spring from the same

idea that hindered a knowledge of the structure of the placenta in the mammifera—namely, that the decidua and the placenta are the product of a transformation of the whole uterine mucous membrane. Others have arisen from the fact that in studying the intimate structure of the organ the opinion has been derived from its examination when completely developed, without taking into account the changes that must of necessity take place in its interior from the first period of development, in which the two parts, maternal and fœtal, which compose it, can easily be separated (as in the non-deciduates and in some deciduates), till the organ progresses and arrives at the second period or at complete development, in which the two component parts are so intimately united as in nowise to admit of separation. The observations made on the formative process of the decidua and the placenta in the vertebrate mammifera warrant the assertion that if the decidua in woman was really derived from a transformation of the pre-existing uterine mucous membrane, it would be a fact quite exceptional for the human species, or, rather, which the human species would have in common with only the higher simiæ.

Before undertaking to show the uncertainties and contradictions which one is compelled to accept as truths—in entertaining the opinion that the decidua in woman is derived from a transformation of the uterine mucous membrane, and not from a neo-formative process, as in all the mammifera—the author draws attention to the not recent observations of Bischoff on the peculiarities of the mucous membrane in the uterus of woman, which he has from the beginning of his labors striven to place in clearer light. And let it be observed that although Professor Kölliker, in his "Treatise on Embryology," repeatedly asserts that the decidua is developed by a transformation of the mucous membrane without a hint of the peculiarities observed in this mucous membrane, he has yet recorded and described them in his "Treatise on Histology."

But, without entering into minute particulars on this subject, which the author has treated at length in one of his preceding works,* he contents himself with noticing one fact, unanimously recognized by anatomists, viz.: that the mucous membrane in the uterus of woman does not present, and can not be detached in folds from the uterine muscular tissue beneath, as can easily be done in the ordinary mucous membranes of other organs. He observes that the reason of this fact consists in this: that the mucous membrane of the uterus in woman is not furnished with a rich stratum of submucous connective tissue, as is the case in the uterus of all the mammifera, the higher simiæ excepted.

Now, this simple and general circumstance being overlooked, and the assertion made that the decidua is derived from a transformation of the mucous membrane, as if this were an ordinary mucous membrane in the strict anatomical sense of the word, occasion is given for not a few ambiguities and uncertainties. "The decidua is," according to the school of Kölliker, "nothing but the uterine mucous mem-

* See the Works of Professor G. B. Ercolani, translated by Henry O. Marcy, M. D., of Boston. Illustrated by a quarto atlas. Published by H. O. Houghton & Co. English edition by Smith, Elder & Co., London, 1881.

brane transformed, and even in the first stages of pregnancy it is exclusively formed from the hypertrophied uterine glands."

And yet everybody knows that, when the fifth month is past, the decidua is detached from the uterus, and its component elements undergo regressive phases. Is it then, perhaps, that new uterine glands begin again to form? Surely not, since Kölliker himself affirms that he has found them hypertrophied and immersed among the innermost layers of the uterus during the whole period of the pregnancy. How is it, then, that they are transformed, and that from them alone the decidua is developed, if, at the same time, they remain hypertrophied in the uterus? Is it, then, only the stratum of submucous connective tissue that is transformed? But this, as has been stated, does not exist in the uterus of woman. Perhaps the transformation is due only to the epithelial stratum of the mucous membrane. But Kölliker himself has shown that this disappears immediately after the act of conception. What part, then, is it of the uterine mucous membrane that is transformed to become decidua?

According to the author, the decidua in the uterus of woman, as in that of the mammifera, is developed from the elements of new formation called deciduates, which derive their origin from the capillary walls of the vessels that remain uncovered by the denudation of the epithelium. Nevertheless, these cellular elements are not found opposite to the discharging apertures of the uterine glands. The hypertrophic condition of these and the fact of the hypertrophy attest their increased functional activity, and the moisture separated from them must necessarily make a passage for itself through the surrounding new-formed cellular elements. The apertures or outlets of the decidua, however, are not glands, as is believed; they are the openings that correspond to the discharging mouths of the said hypertrophied glands in the uterus. But, moreover, in that portion of the decidua against which the ovum rests, and which, therefore, will become the maternal portion of the placenta, every trace of glands is very quickly lost, as Kölliker himself asserts. The reason of this singular fact in a part which has been declared to be exclusively formed from the hypertrophied utricular glands deserves to be sought for—all the more, since in the subjacent stratum which touches the uterus evident traces of altered glands are found, even when the pregnancy has reached its term; and the reason is found in the altogether special form which vascularization assumes in the placenta of woman—a form of vascularization that completely wastes away the glands. Now, in the said part the glands have already disappeared, Kölliker tell us, before the completion of the first month; and as we know that the special form of vascularization—vascular aneurysm, that is, or lacunæ—is not established until about the third month, an effect is thus ascribed to a cause which, at the very time when it was operating so energetically, did not yet exist.

From what has heretofore been said, it clearly appears that, for the author to proceed in the minute criticism of separate particular facts in order to exhibit the uncertainties and contradictions which they include, it would be ne-

cessary to quote his work in great part. It will be sufficient to mention that the examination of the well-developed uterine decidua observed in cases of extra-uterine pregnancy convincingly show that in woman, as in the deciduates and non-deciduates, the decidua is developed by means of a neo-formative process, and that the new-formed cellular elements take their origin from the walls of the capillaries.

The author follows the arrival of the ovum in the uterus up to the complete development of the placental organ in that portion of the decidua against which the ovum was arrested. He shows how those who defend the transformation of the mucous membrane are themselves forced to recognize a process of active proliferation in the decidual elements to account for the formation of the decidua reflexa. Held by this, the ovum is fixed against the new-formed decidual elements, which are vigorously proliferous, and form the obstacle which the walls of the ovum oppose to the exit of the fluid separated by the underlying utricular glands. These glands are, from the pressure exercised by the separated fluid, dilated and altered; thus take place the two strata constituting the uterine or maternal part of the placenta, the spongy stratum near the uterus, or the non-caducous portion of the placenta of Kölliker, formed from the altered utricular glands, evident traces of which may be observed even at the termination of pregnancy; and the stratum over this, developed from the new-formed decidua, or the caducous stratum of the placenta in which there never are traces of glands, because there never were any glands there. It is in this stratum that the placenta is formed; and all anatomists agree in recognizing that in the first months of pregnancy this is developed from a mass of cellular or decidual elements, traversed by a vascular network with endothelial walls only, and that among the said decidual elements the foetal villi are buried.

This is the first period of the development of the human placenta which is observed in the first three months of pregnancy; and, as long as it lasts, the foetal part can be separated without laceration of the maternal part, as happens in the mammiferous non-deciduates.

The second period of development, in which the organ is perfected and completed, and which renders it first difficult, and, later, impossible to disjoin the foetal portion from the maternal, begins, by the universal consent of anatomists, with the establishing of two facts—the rapid and exuberant proliferation of branches from the trunks of the villi, and the ectasic process in the network of the maternal vessels. Now, these two facts occurring contemporaneously in a limited and circumscribed space, as the result of simple physical and mechanical laws, it must necessarily follow that the branches of the proliferating villi should press against the endothelial walls of the vessels, which are at the same time dilated; and the ultimate result is, that the walls of the vessels, at first simply bent in toward the internal cavity of the dilating vessel, must, as the process of aneurysm becomes more and more pronounced, completely invest the villus the more, as this fact is helped by the tension exercised upon the walls of the vessel by the proliferous branches of the villus. That this takes place has been heretofore ob-

served by Weber and by Virchow, when they described in human abortions the occurrence of tufts of villi making complete hernia in a maternal vessel.

It is not possible to sum up in a few words the observations made by the author, as he follows minutely the succession of these facts in the development of the human placenta. It will suffice to say that he shows how the observations of Weber and Virchow give, in what may be styled a rudimentary form, the exact conception of the intimate structure of the completely developed human placenta, because as in this there is the appearance of the fetal villi swimming in the blood of a lacuna, it may likewise be the case in the observations cited, while in reality it is the villi that have caused hernia in the lumen of the dilated vessel, bending inward the walls at the place where they seemed to penetrate.

With these views, all the uncertainties that encumber the knowledge of the intimate structure of the placenta of woman entirely disappear, and the author shows that it is no longer necessary to suppose the penetration into the interior of the placenta of two plates—the one called by Winckler fundamental, the other of inclosure—the placental caduca and the subchorial stratum of the placenta, according to Kölliker, who does not himself know when they have been transmitted thither from the decidua and the reflexa. The explanation is clear that the so-called lamina of inclosure is not continuous, this depending on the arrival or non-arrival at the chorion of the wall of the enlarged vessel resembling the lacunæ. It is no longer necessary, in order to understand the formation of these last, to have recourse to the hypothesis that the villi, in proliferating, corrode the maternal tissue and the walls of the vessels, determining a sort of physiological hæmorrhage. There is reason for the internal divisions of the placenta being constituted of two plates, although they spring from one uniform and continuous stratum. It could not be otherwise, since they represent the walls of two adjacent enlarged vessels, furnished on their external surface with the decidual elements which these vessels elaborate.

There is also reason for the manner in which are formed the so-called roots of attachment, the discovery of which has been erroneously attributed to Langhans.

In short, the author shows that, by substituting the observation of the neo-formative process of the decidua for the imaginary doctrine of the transformation of the pre-existing mucous membrane, and that by following the formative process of the placenta from its first to its second phase of development, not only are all the uncertainties and all the errors avoided, which are generally taught at this time, but there is acquired a simple and clear acquaintance with the histological structure of an organ so important, not merely in woman, but also in all the mammifera.

As to the human placenta, it may be said that the chief difficulty of the question is contained in the opinion held upon the nature of the external clothing of the fetal villi in the placenta at term. According to the author, this investment is supplied to the villi from the mother.

By Kölliker, such an assertion is not even to be discussed, because the fetal villi are covered with a pe-

culiar epithelium from the first moments of their development.

Apropos of this are shown the striking differences of form and size between the true fetal epithelium clothing the villi during the first period of development in the human placenta, and the covering shown by the same villi when the placenta has completed its phases of development, thus, for the most part, overthrowing Kölliker's reasoning.

But the clearest and most convincing proofs for confirming the conclusions of the author are drawn from the observations made in the field of comparative pathological anatomy, which form the subject of his third and last letter.

In this, he strengthens with these observations the opinions offered upon the intimate normal structure of the placenta in the mammifera, as well as in woman.

For the mammifera, he described the maternal portion of the placenta at the close of pregnancy in the uterus of a female *Myoxus glis* (dormouse), in which that part of the organ continued to develop in three segments, besides the ten which were full, notwithstanding that in the said three the embryos had died at the beginning of the pregnancy, the fetal part of the organ had been necessarily arrested in its development, and that part atrophied which was developed before the embryos died.

Professor Cesare Belluzzi furnished the material for an analogous observation obtained in a woman who was delivered of a nine-months placenta, to which was united, by an atrophied cord, a small shrunken embryo, of about the size of the human fetus in the second month of intra-uterine life. The examination of the fetal villi in this placenta showed that the parenchyma of the villi was atrophied, and here and there changed by a chalky, granular degeneration, and that the so-called external epithelium of the villi was notably enlarged by hypertrophy and hyperplasia of its cellular elements. Since it would be absurd to believe that certain elements of a dead part might not only live, but be prolific, this observation furnishes an evident demonstration that in this woman were repeated the conditions found in the *Myoxus glis*, viz.: that the maternal part of the placenta had continued to develop after the death of the embryo, and that, consequently, the hypertrophic covering of the fetal villi can be maternal only, and not fetal.

The examination made by the author of two human placentæ that remained in the uterus after parturition "at term," the one for two, the other for three months, offered a favorable opportunity to make comparison with the aforesaid observation, and to exhibit the differences met with in conditions that may be styled analogous: when the maternal part of the placenta overruns its ordinary phases of development, and when the life in it is maintained beyond the ordinary term by an accidental cause.

For proof that the exterior covering of the fetal villi is furnished by the endothelial walls of the placental vessels, and by an external stratum of the decidual cells elaborated from their walls, the author records his observations, largely confirmed by Professor Roniti and others. Such observations are not difficult to make in examining villi of placenta of human abortions, in which, through the alteration of the parts that determine the abortion, a state is kept stationary,

which is only transitory in the normal condition—that is, the persistence of the chorionic epithelium of the villus, although it may be surrounded by the maternal covering which remains separate from it.

To complete, from the pathological point of view, the observations and the conclusions reached upon the intimate structure of the human placenta, the author describes the anatomical lesions observed in a syphilitic placenta at term, in which he follows the process of infiltration of lymphatic cells, and of complete mucous or colloid degeneration in the portion called by Kölliker *caduca* of the placenta, and which, by universal consent, exclusively appertains to the mother. The same pathological process is followed by the author in the so-called epithelioma of the villi in woman; and he observes how this process of infiltration of new elements, and subsequent colloid degeneration, which determines a swelling of the external wrapper of the villi, has been by learned writers designated by the improper name of deforming hypertrophy of the villi.

His labor thus ended, the author turns to the illustrious anatomist to whom he has addressed his letters, confident in the belief that he will at least concede that he has not been prompted by a selfish personality in thus controverting his views taught upon this subject, but that, the rather, he was drawn to it by the love of truth, and that, after long and repeated investigations, he has felt bound to obey the first duty of inquirers, whether great or humble—namely, to act in the best way possible to them for the discovery and promotion of truth.

THE PATHOLOGY OF ACUTE LOBAR PNEUMONIA

FROM A NEW STANDPOINT.

By WILLIAM D. SCHUYLER, M. D.

First Article.

An Introductory Summary of the Diverse Views held by Leading Authors as to the Nature of the Disease; its Various Manifestations; its Unexplained Phenomena; its Importance; the Necessity of Accurate Pathological Data for Therapeutical Indications.

THE absence of a settled general opinion relative to the well-recognized disease acute pneumonia, its obscure pathogenesis, as conceded and generally regarded, the universal prevalence of the disease and its destructive results, combined to render it a subject of deepest interest to the medical student, whether pathologist or clinician.

The diversity manifested by the disease in different individuals, in the degree of its symptoms, in its course and development, and in the mode of its resolution; the sudden termination of its symptoms when the process is at its height, as determined by the symptoms less the physical signs; the want of a constant relation between the constitutional symptoms and the extent of the local process; the manifestation of unexplained phenomena in regard to the most common site of the affection, i. e., in certain portions of the lung; in regard to pathological results, especially the non-injurious character of the process upon the pul-

monary structure, the unexplained vascular conditions throughout the process, the *rationale* of the occurrence of crisis, and the unexplained phenomena of its temperature curve; besides other facts which relate to its blood conditions, to exudation, to nutrition, and especially excretion—
increase and deepen this interest. Furthermore, the existing difference of belief and teaching among prominent and accredited authors as to its true nature or essential character as a pathological process; some holding to the old belief that it is a local disease merely, with its consequent and attendant general symptoms; others arguing with equal or more force that it is a constitutional affection—an infectious febrile disease with a local lesion; and others still, undetermined, finding in both theories given points which they support and others which they reject. This difference of authority more than anything else enhances the importance of the subject and justifies investigation, however divergent from the generally received views the conclusions may be.

To define the nature of this malady which has been the object of much study, many essays and discussions; to show that its true character is specifically different from what it has been held to be historically, and that later as well as early teachings regarding it are untenable and inadequate to form a basis upon which may be constructed a rational plan for the treatment of the malady; to point out what I conceive to be the cause of and the initial lesion in the process; and especially to characterize the initial lesion, and show how all subsequent phenomena are but a natural sequence of it as it occurs—in a word, to suggest a broad basis of settlement for the character of the disease upon which all of its phenomena can be explained, to point out more clearly the dangers which attend the process, and to indicate a rational treatment for the same, is the object of this paper.

To initiate a departure from views which are historical and further sanctioned and established by the authorities of our own time; to take issue with beliefs and dogmas seemingly well grounded by microscopical research, sanction, and support, is no easy task, and is one which I should not presume to undertake did not my own convictions, a sense of duty, and the claims of scientific truth, impel me to it.

That acute lobar pneumonia is a disease well worthy of most careful study, and that any truths which may be evolved thereby merit fair and honest scrutiny, whatever their source, is evident from its very serious character, which can not be over-estimated, from its general prevalence throughout the habitable world, and from its disastrous effects upon persons of all ages and all conditions of life, and such a study especially commends itself to medical men at this time for its more recent effects during the past winter in taking from our midst many useful lives.

From a clinical point of view, any light thrown upon this pathological process which shall define its scope, which limits and explains its different events, which more clearly interprets its symptoms and fixes the relation of the constitutional signs to the different movements and events of the local affection, which clearly specifies the dangers which may arise and traces them to their true cause, and which

shall point out the various indications for a rational treatment, should be most thankfully received. I may remark here that the practical scope of this work has especial regard to the latter reference to treatment. That there is need for therapeutic light in the management of this malady, that the treatment of acute lobar pneumonia has been, and is yet, most empirical, one must conclude from a general survey of the remedies used and plans resorted to, tried, and applauded, rejected and again advocated. Venescetion, tartar emetic, salines, salines with stimulants, veratrum, aconite, digitalis, sweating, cold inhaled, cold externally, packing, sedatives and stimulants, treatment by quinine, expectant treatment, and rational treatment, so called, have each had their day, and each still has its advocates. The list given, considered with regard to the therapeutical effect of each remedy, is its own commentary, and clearly exhibits the blind groping and the absence of anything like an inductive method governing the means used. I do not mean to be understood as condemning a single remedy included in the above list. Each is valuable if rightly used according to a proper indication, but each is equally potent to do harm according to its activity or inertness if wrongly administered. This is what I would point out, that remedies work both ways, and that in no disease may a potent drug do more harm than in the process we are about to study. The indiscriminate use of remedies, therefore, is what we should deplore and strive to correct; especially as we exhibit them in a process so readily affected, so full of peril, and which, on account of some mistake, may in any stage prove fatal in a few hours.

We can not be prepared to exercise judgment in the management of a diseased process until we appreciate its true character—the nature of the action set up, its ætiology, the significance of its symptoms and course, and the results of the morbid action or its inherent dangers. Until we have such complete knowledge of the disease from which to derive indications for treatment, we are more or less at sea, and in so far our therapeutics is both empirical and unscientific, if not positively dangerous or harmful. That we have as yet no well-grounded notions of the nature and true character of acute pneumonia may be inferred from what has already been said, and will be more clearly pointed out as we proceed; that we are in doubt as to the significance and cause of certain symptoms and phenomena, and also that the dangers which may arise are not well appreciated, will also be shown.

As setting forth, in brief, some of the uncertainties which are entertained relative to the disease, I give the following: 1. There is the general uncertainty, already specified, as to the true or essential character of the action set up, or of the nature of the entire disease. 2. Its pathogenesis is involved in obscurity, and its immediate cause is uncertain. 3. The tendency of the local affection to involve by preference certain portions of the lungs, the lower lobes, and the lower lobe of the right lung, in a majority of cases, is unexplained. 4. Many of its symptoms are not satisfactorily accounted for; notably, the cause of dyspnoea or of the greatly increased rapidity of the respiratory movements. 5. The cause of the phenomena of resolution by crisis, the

natural mode, and a most remarkable event, has not as yet been given. 6. There are *sub judice* questions as to the origin of exudation or some of its constituents, as to the condition of the affected vessels throughout the course of the process, and as to the febrile signification. Furthermore, as before noticed, the relation of the general symptoms to the local affection, and a seeming want of conformity of the former to the latter, is to be explained.

In the articles to follow, want of space and the desire not to be needlessly prolix and wearisome render it both impossible and impolitic to give even a partial reference to the many theories, views, and discussions which are extant relative to the subject under consideration. But, with the least that can be said for the end in view, a consideration of the entire subject of pneumonia will be somewhat extended, and, as this work is necessarily of the nature of an argument, fullness or completeness must be given upon doubtful points. However, so far as the writer's art will avail him, brevity will be studied. The functions and forces involved, the effects of the process in deranging the former and creating degrees of morbid development in the latter, and the action of events to produce morbid effects at one stage and conservative effects at another, render the subject, from a scientific and dynamic point of view—though intricate and difficult of portrayal—yet very interesting.

Book Notices.

The Dispensatory of the United States of America. By Dr. GEORGE B. WOOD and Dr. FRANKLIN BACHE. Fifteenth edition, rearranged, thoroughly revised, and largely rewritten. With illustrations. By H. C. WOOD, M. D., Member of the National Academy of Science, etc., JOSEPH REMINGTON, Ph. G., Professor of Theory and Practice of Pharmacy in the Philadelphia College of Pharmacy, etc., and SAMUEL P. SADTLER, Ph. D., F. C. S., Professor of Chemistry in the Philadelphia College of Pharmacy, etc. Philadelphia: J. B. Lippincott & Co., 1883. Pp. viii-1,928. [Price, \$8.]

THE United States Dispensatory has always been an indispensable work to pharmacists, and far more adapted to be of service to practitioners of medicine than those who have not familiarized themselves with it would be likely to imagine.

The fifteenth edition has been brought into accord with the new pharmacopœia, and in many other ways the work has been amplified and improved. It would be strange if so large a book, embodying so much new work as this edition does, were wholly free from points open to criticism. We have observed several, but we will mention only two. The first is a tendency to irrelevant and unnecessary comments from a therapeutical point of view, as exemplified in the remarks on pulsatilla. The second is an occasional forgetfulness that the book is liable to be followed literally by persons who are incapable of digesting its contents. An instance is to be found in what is said of the treatment of phosphorus poisoning with sulphate of copper. The unqualified advice, "Sulphate of copper, with opium to restrain the emesis, should be administered in such doses as the stomach will retain," seems questionable in a work of this sort. Such defects as these, however, are trifling in comparison with the sterling value of the therapeutical part of the book as a

whole. The editors have certainly done their work well, and this latest edition can scarcely fail to maintain the status of the dispensatory with physicians and pharmacists.

Therapeutic Hand-book of the United States Pharmacopœia. Being a Condensed Statement of the Physiological and Toxic Action, Medicinal Value, Methods of Administration, and Doses of the Drugs and Preparations in the Latest Edition of the United States Pharmacopœia (Apothecaries' and Metric System), with some Remarks on Unofficial Preparations. By ROBERT T. EDES, A. B., M. D. (Harvard), Professor of Materia Medica in Harvard University, etc. New York: William Wood & Co., 1883. Pp. vi-397.

THIS book bears a striking general resemblance in its appearance to the pharmacopœia itself. Although professedly a companion to that work, its chief excellence, we think, lies in the short supplementary section devoted to non-pharmacopœial drugs. The information it conveys is for the most part exceedingly fragmentary. Nevertheless, those who are entirely ignorant of materia medica and therapeutics can learn something from it.

Having been a member of the committee that prepared the pharmacopœia, although, as he tells us in the preface, prevented from taking an active part in the work of revision, the author of this book, it might be supposed, would have become imbued with the spirit that animated the committee; yet in some respects his production is quite opposed to that spirit. The committee set itself rigidly against a nomenclature that confounded the alkaloids with neutral principles. It also discarded the absurd names ending in *ia* that have so commonly been applied to the alkaloids. The committee's course in regard to these matters was eminently wise, but Dr. Edes disregards it again and again in the book. Besides this evidence of carelessness, for we can not look upon it as significant of a deliberate intention to thwart the good influence of the pharmacopœia, we would remark upon the many inaccuracies in the French and German equivalents of the pharmacopœial names of drugs.

An Index of the Practice of Medicine. By WESLEY M. CARPENTER, M. D., Assistant Pathologist to Bellevue Hospital, etc. New York: William Wood & Co., 1883. Pp. 304. [Interleaved.—Pocket cover.]

THIS little work is entitled to rank far above the compends of which there is such a surfeit. Although modestly put forth, it is evidently not a mere compilation, but shows method and mature thought on the author's part. With the exception of syphilis and skin affections, it gives a condensed picture of all the ordinary diseases, together with succinct hints for their management. Dr. Carpenter is one of the few who, like the late Dr. Tanner, have the faculty of telling the reader in few words just what he is most likely to need to be told. The form in which the volume is brought out, with a flap cover for the pocket, was a happy idea, for we know of no book that a busy practitioner would find it more profitable to carry about with him in his daily rounds, to be taken out and read at odd moments, or studied on long, lonely drives.

BOOKS AND PAMPHLETS RECEIVED.

Excision of the Knee Joint, with Report of Twenty-eight Cases, illustrated by Thirteen Photo-lithographs and Wood Engravings. By George Edgeworth Fenwick, M. D., C. M., Professor of Surgery, McGill University, Surgeon to the Montreal

General Hospital. Montreal: Dawson Brothers, 1883. Pp. 68. [Price, \$2.25.]

Experimental Researches on the Tension of the Vocal Bands. (a)—The Action of the Thyro-cricoid Muscle. (b)—The Action of the Expiratory Blast of Air. By F. H. Hooper, M. D., Boston, Assistant Physician to the Clinic for Diseases of the Throat, Massachusetts General Hospital, etc. Pp. 20.

The Stuart Period from a Medical Standpoint. By R. L. Macdonnell, B. A., M. D. [Reprint from the "Canada Medical and Surgical Journal."]

Synchysis Scintillans. By David Webster, M. D., Professor of Ophthalmology in the New York Polyclinic. [Reprint from the "Archives of Ophthalmology."]

Suicide. Being the Fifth of the Popular Lectures in Cooper Medical College. By L. L. Dorr, M. D., Professor of Materia Medica and Therapeutics. Pp. 28.

Transactions of the Medical Society of the State of West Virginia, sixteenth annual session, 1883.

Announcement of the Medico-Chirurgical College of Philadelphia, Sessions of 1883-'84.

Medical College of Virginia, Richmond. Catalogue of Officers, Students, and Graduates for the Session of 1882-'83, and Announcement of the Session of 1883-'84.

College of Physicians and Surgeons, Medical Department of Columbia College in the city of New York. Seventy-sixth Annual Catalogue and Announcement.

Announcement of the Baltimore Medical College, 1883-'84.

Closing Exercises of the Practitioner's Course of Lectures, delivered in the spring of 1883, in the Hahnemann Medical College and Hospital of Chicago.

Annual Report of the Buffalo General Hospital, for the year 1882.

Catalogue and Announcement of the Medical Department of the University of Georgetown, District of Columbia. Thirty-fourth Medical Session, 1883-'84.

Third Annual Announcement of the Collegiate Department of the Minnesota College Hospital, Minneapolis. Collegiate year, 1883-'84.

Sixteenth Annual Announcement and Catalogue of the Medical Department of Howard University, including the Medical, Dental, and Pharmaceutical Colleges, Washington, D. C., 1883-'84.

Official Register of the Dentists of Iowa who registered as having been in practice prior to March 8, 1882, and those to whom licenses have been issued by the Iowa Board of Examiners. Revised and corrected to June 1, 1883. Published by authority of the Board of Examiners. Also Dental Directory of Missouri, Minnesota, Kansas, Nebraska, Texas, and the Territories, 1883.

NOTE ON DISINFECTANTS.—In the "British Medical Journal" Dr. W. E. Buck writes: Most practitioners must have often realized the inefficiency of disinfectants in allaying the fetor of cancerous ulcers, an annoyance which sometimes troubles patients even more than the pain, or the thought of death. I have used the whole round of disinfectants for cancerous ulcers, but all have failed in allaying the fetor and keeping the ulcer clean. The disinfectants tried were carbolic acid, sanitas, terebene, resorcin, creasote, boroglyceride, chloride of zinc, charcoal, etc. After failure with these, I tried a saturated solution of hyposulphite of sodium added to an equal quantity of water, and found it exceedingly efficacious. The ulcerating surface was well syringed and washed with the solution, and was then covered with rags steeped in it. The granulations were kept clean, and the fetor was well kept under. Most disinfectants seem to lose their virtue after a few days' application, but I have used this one for months in the same patient with continuous good effects. It is cleanly, has no smell, does not stain, and is very cheap.

THE
NEW YORK MEDICAL JOURNAL,
A Weekly Review of Medicine.

Published by
D. APPLETON & Co.

Edited by
FRANK P. FOSTER, M. D.

NEW YORK, SATURDAY, AUG. 4, 1883.

THE PROPOSED STATE MEDICAL EXAMINING BOARD.

WHILE there can be but little doubt that the Legislature of the State of New York will before long give serious consideration to the matter of creating a State examining board as a sole licensing body, and still less doubt that the establishment of such a board will be favored by the great majority of the profession, it can not be denied that the advantages to be gained by the people and by the profession from the enforcement of such a scheme will depend upon points of detail concerning which opinions do not yet seem to be settled.

One of the first questions to be determined seems to be, as to who are to be affected by the board's action. It seems to us that all legally qualified practitioners living within the State at the time the act goes into effect should be exempt from its operation. Of course, such exemption will render the elevation of the tone of the profession that is looked for as a consequence of the measure slower of accomplishment than would otherwise be the case. It is better, however, that immediate and striking results should fail to take place than that individual rights should be invaded. But it is to this extent only that leniency seems desirable. All physicians coming from beyond the limits of the State for the purpose of engaging in practice should be required to undergo a *bona fide* examination by the board, no matter what their fame or achievements may have been, or what diploma they may have. Any other course would be unjust to our own colleges and to their graduates.

As to the constitution of the board, it should unquestionably be a body of men charged with the work of examining and licensing, and with nothing else. It will not do to put so much labor and responsibility on any board existing for other purposes. In some of the States, it is true, a function very much the same in kind has been given to sanitary boards, and it can not be denied that, in two conspicuous instances at least, those of Illinois and West Virginia, the State Board of Health has acquitted itself creditably. But it should be borne in mind that what work of this kind is done by those boards has reference only to persons who are in an exceptional position as regards their professional status, and not at all to the annual recruits from the colleges, for the diplomas granted by the latter still constitute so many licenses to practice. Moreover, State boards of health are constituted with special reference to the sanitary work required by the community, and there is no guarantee that their *personnel* will at all times be such as to fit them to act satisfactorily as examining and licensing bodies on so large a scale as the policy under consideration would call for. There is, indeed, little probability of its being of that character at any time.

If the board is established at all, it will be for the good of the people primarily, and for that of the profession only incidentally. The Legislature will therefore, doubtless, insist that the medical sects recognized by the State shall be represented. We can not see that this will do any particular harm if it is properly managed. It is useless, however, to expect good of a *pro rata* representation. There is no ostensible conflict between the rival sects in medicine, save in the single field of therapeutics. It seems necessary, then, that there should be three separate examiners in this department—one for the non-dogmatists, one for the homœopathists, and one for the so-called eclectics. In all the other branches there should be but one examiner for each, and in no instance should he be chosen from the ranks of the sects. We shall certainly be justified in insisting on the predominance of legitimate medicine to this full extent, and, while it will be our duty to obey whatever law may be enacted, and to do our best to make its operation as satisfactory as possible, we shall be culpable if we fail in any lawful endeavor to resist the encroachments of the sects beyond the point mentioned.

Perhaps the most knotty point of all to decide is, as to the mode in which the examiners shall be appointed. No better plan seems to suggest itself than for the Medical Society of the State of New York to appoint a full corps, and for each of the two analogous sectarian societies to designate an examiner in therapeutics. But, even if this course were determined on, questions of detail would still arise. It would have to be settled, for instance, whether teachers of medicine should be excluded from the board, and that question might either be decided by the law, or left to the determination of the societies. It would probably be politic, if nothing else, to exclude them. The tenure of office is not a consideration of the first magnitude, but it would be well to provide for overlapping terms, rather than a complete change at stated times.

The board should be a large one, examining in many more branches than the college faculties, and representing all the recognized departments of medicine. It is a question if it should not be a double one, to facilitate its holding sessions in various parts of the State. If this is not thought necessary, there should certainly be alternates appointed in each branch, to guard against inefficiency from causes affecting individual members.

Although the board should be the sole licensing body, it is questionable if it ought to issue its own diploma. It would doubtless tend more to promote a continuance of the desirable feeling of attachment that exists between the several colleges and their graduates, if the board's license were simply affixed to the college diploma in the form of a confirmation.

All these matters, and perhaps others of equal importance, should be well considered by the medical profession in the State, for it is quite probable that the Legislature will take action before long, and it behooves us to exert our influence to make that action as wise as may be. It will not do to lay rival schemes before the law-making body. To accomplish anything, the profession must know what it wants, and its wishes

must be expressed definitely and in such a way as to afford no reasonable pretext for hunters of mares' nests to pose before the public with the air of having ferreted out an attempt on the part of the regular profession to strangle the sects.

LIFE INSURANCE AND THE PERILS OF CHILDBIRTH.

WHEN an accused person is conceded to have proved an alibi, and then goes on to offer corroborative testimony of his innocence, he is apt to put himself in the attitude of the dame who, when charged with having broken a pot she had borrowed, declared that the pot was cracked when she got it, and then added that she had never had it. This reflection is suggested by the pains that seem to have been taken of late by the officers of some of our life insurance companies to fortify their denial of certain motives said to have been attributed to them by Dr. W. A. Hammond as lying at the bottom of their unwillingness to insure the lives of women—as if their bare statement were not likely to be accepted by the public.

Dr. Hammond's allegation is understood to have been, that the reputation of the sex for inaccuracy was such that the companies felt it unsafe to rely on their answers to the questions put to them by the medical examiners. The gentlemen of the insurance companies aver that this is not the case, but that they are perfectly willing to insure the lives of women at a trifle in excess of their ordinary rates, that excess being rendered necessary, in their opinion, by the increased mortality due to childbearing among women who are below the age at which that function ceases. They add, that for insuring women past the menopause they charge no more than for insuring men of the same age. One of them remarks that the childbed mortality is very moderate in the civilized countries of Europe, being the lowest of all in France, but that in this country it is "frightful."

Now, let us look into the matter a little. The most trustworthy estimates are to the effect that, in Great Britain, in round numbers, one labor in every hundred gives rise to the mother's death. Dr. Lusk, who has investigated the matter with extreme carefulness, tells us, in his "Science and Art of Midwifery," that, according to the New York Board of Health's statistics for a term of years, the proportion in this city is about one to eighty-five. It is only fair to add that he says "at least" one to eighty-five. Assuming that the Board of Health's statistics are correct, this difference is certainly one to challenge attention and to occasion regret, but not, with any just appreciation of the force of words, one sufficient to warrant our friends of the insurance companies in calling the puerperal mortality of the country "frightful." Nor is it fair to make the New York mortality the basis of a calculation for the whole country. The general death rate of New York is high, as is well known, although not actually so high as the figures always make it appear; and that fact of itself would vitiate any estimate of the puerperal mortality of the country at large founded on those figures. Moreover, the total childbed mortality of this city includes the deaths of an enormous proportion of women

of foreign birth, many of whom are rhachitic or in various other ways predisposed to severe complications of the process of childbearing—a class, be it noted, with which the life insurance companies can scarcely have much to do.

The companies understand their business thoroughly, and there is nothing to show that they fall into the error of hampering its extension by the imposition of unnecessary increments of rate. It may well be conceded that they have sufficient reason for demanding higher rates from women than from men; but this is by no means equivalent to admitting that the perils of childbirth are of themselves enough to constitute that reason. At all events, those perils can not be said to be "frightful."

THE NEW QUARANTINE STATION ON CHESAPEAKE BAY.

WHATEVER uncertainty may be felt as to the strict legality of the Secretary of the Treasury's assumption that the lapse of an Act of Congress substituting the authority of the National Board of Health for that of the Surgeon-General has virtually revived the latter, there can be no other feeling than that of gratification at one of the immediate results of the Secretary's course, namely, the establishment of a quarantine station at the mouth of Chesapeake Bay. Certain it is, at all events, that those who live on the banks of the Susquehanna, the Patapsco, the James, or the Potomac, will not be in haste to criticise the Government for massing its quarantine operations in the neighborhood of Cape Charles and Cape Henry, rather than adhering to the more costly and far less efficient system always hitherto employed of dividing the work between the waters of Norfolk, Baltimore, and other ports on the arms of the bay.

Surgeon-General Hamilton, of the Marine-Hospital Service, has now an opportunity, such as is seldom afforded a medical man, to demonstrate before the whole country the necessity and the value of an enlightened and energetic central sanitary administration. Coupled with that opportunity there is, of course, a grave responsibility. We may well believe that Dr. Hamilton appreciates both the one and the other. Bound, on the one hand, to an efficient and at the same time economical use of a limited special fund, applicable to the work of staying the progress of epidemic diseases on internal lines of communication, and charged, on the other hand, with all that the National Government can do to the same purpose on the coast, the course of the Surgeon-General needs to be guided by sound judgment and discretion, as well as impelled by energy. Strengthened as his hands are now by the prominence of a threatened visitation of yellow fever in the public mind, the danger is that, when the first wholesome dread is over, the demands of trade will cease to find a check in that popular support that the administration of sanitary measures always needs. That the Surgeon-General will prove himself equal to such a contingency there is every reason to trust, judging from his admirable course thus far. It must be said that nothing could more encourage confidence than this action on Chesapeake Bay. It seems safe to assume that we shall not soon again be told of a yellow-fever ship having made her way into the harbor of Baltimore unmolested.

THE AMERICAN NATIONAL ASSOCIATION OF THE RED CROSS.

SMALL as the chance may be of our suffering to any serious extent this summer either from cholera, from yellow fever, or from some other pestilential disease, such a contingency is not by any means so remote as to excuse a lukewarm regard for any measure of preparation designed to mitigate the distress that is always unavoidable as the result of an epidemic visitation. It is satisfactory to know, therefore, that we have in this country an organization acting under the auspices of the Geneva Convention. Thanks to Miss Clara Barton, whose tact and perseverance finally succeeded in inducing this "government of the people, by the people, and for the people" to condescend to allow its citizens to share the benefits of the confederation of Red Cross societies, we are now in a position, should occasion arise, to profit by the machinery of relief made ready, we can not doubt, by the American society.

Fortunately, warfare within our borders has not called for the relief measures it contemplates. It was our last war, however, and in particular the admirable work of our Sanitary Commission, that was largely instrumental in drawing the attention of the humane promoters of the Geneva Convention to the good that such an organization might accomplish. It is but fitting, then, that our people should first feel its practical working under other calamities than those involved in an armed contest. Our expectation that neither cholera nor yellow fever will obtain a foothold in the United States this season may at any time be shown to have been over-sanguine. Should such a state of things come upon us, and any of our large cities find its industries paralyzed and its sanitary resources crippled, the knowledge that the medical and nursing corps of the Red Cross can promptly be brought into play, as well as its stores of supplies, its provisions for hospital work, and its ambulance service, to say nothing of food, medicine, and money, will tend powerfully to counteract any tendency to panic.

MINOR PARAGRAPHS.

YELLOW FEVER.

OF the two diseases, yellow fever and cholera, it looks as if we were in more danger at present of an outbreak of the former. Up to the present time, however, the country has remained free from it, although vessels from Vera Cruz continue to land sick passengers at Havana, and in some instances to proceed to American ports. Information having been received from our consul at Vera Cruz in regard to the sailing of certain infected ships, but without mention of their destination, that officer has been directed to furnish more specific information on that point in future communications.

On Thursday of last week a seaman died of yellow fever at the Philadelphia Lazaretto station. He had come from Havana on a brig, which, it is stated, will probably be detained at the station for a period of three weeks. The steamship California, from Vera Cruz, arrived at Baltimore on Friday of last week, having had four deaths from the disease during the voyage. Several of her company were still sick with it. The vessel was at once quarantined.

Stimulated, perhaps, by this occurrence, together with the apprehension expressed by the people of Norfolk and Ports-

mouth in consequence of the proximity of the old quarantine station, the Secretary of the Treasury has taken the responsibility of interpreting the expiration of an Act of Congress, passed in 1879 (which gave to the National Board of Health the power of enforcing the quarantine of infected vessels, and the isolation, disinfection, and even destruction by fire of infected freight, substituting the board for the Surgeon-General of the Marine-Hospital Service), as restoring the validity of the act of 1878, and reviving the authority of the Surgeon-General. The Secretary has concluded that Congress could not have meant to do away wholly with the provisions of both acts, the two being almost the same, except with regard to the officers designated to execute them; and he holds that the repeal of the act of 1878 by the passage of the act of the following year was but a limited repeal, the lapse of the latter restoring the force of the former. He decides, accordingly, that the Surgeon-General may again enforce the necessary regulations, and that customs officers shall carry them out, at the same time cautioning the latter against measures of undue severity.

By virtue of this decision, the Surgeon-General of the Marine-Hospital Service has assumed full control of the coast sanitation, and has taken the important step of quarantining vessels at a point near the entrance to Chesapeake Bay—a measure that can not fail to add materially to the efficiency of the quarantine. All foreign vessels will be stopped and inspected at the station.

Another circumstance of some promise, so far as it goes, is the arrangement by which the steamships of the Alexandre line are permitted to load and unload at a distance from the port of Vera Cruz.

CHOLERA.

THE outlook in regard to the chance of the disease being kept out of Europe seems brighter than at this time last week. There is still no evidence that any genuine cases have occurred in Europe, and the force of the outbreak in Egypt seems to be on the decline. On the other hand, a new source of danger threatens this country, inasmuch as the disease is reported to have broken out in Rio de Janeiro, where twenty-four deaths are said to have occurred from cholera during the week ending July 26th. Moreover, although the sanitary inspectors employed by our consuls in Great Britain have thus far found no occasion for alarm from the state of any vessel bound from British ports for the United States, our Government has received information that several vessels laden with rags have left Egyptian ports since the epidemic broke out, bound for New York, Boston, and some of the lesser New England ports. On Friday of last week a steamship having rags on board arrived at Boston, where the captain stated that, as far as he knew, there were no rags or paper stock in her cargo. Nevertheless, the ship's papers showed 115 bales of rags. On board another vessel that reached the same port the next day, from Liverpool, 150 bales were found. In this case, too, the captain had denied all knowledge of such a cargo.

In view of these facts, unusual precautions are taken at the large Atlantic ports, and the Health Officer of the Port of New York has issued the following notice to consignees and importers:

"In view of the fact that cholera is prevailing as an epidemic in Egypt, and at points in the direct line of commercial intercourse with the port of New York, and that rags, one of the most common of the carriers of the germs of infectious and contagious diseases, are brought in considerable quantity to this port from Alexandria, Cairo, and ports on the Mediterranean east of these ports, notice is hereby given that before such cargo is allowed to pass the New York Quarantine, satisfactory evidence must be given that they have been washed and re-

baled at ports this side of the infected localities, and where there is no suspicion that the disease prevails. It is believed that this article of commerce is frequently shipped from the ports referred to to European ports, where competition in freights is so considerable as to make it profitable to reship to this port. Consignees or owners of such cargo will be required to furnish satisfactory evidence that rags reshipped from such ports have been cleansed, disinfected, and rebaled at the port of transshipment."

THE SANITARY CONDITION OF PHILADELPHIA.

At a meeting of the Philadelphia Board of Health, held on Friday of last week, General Kinsey offered the following:

Whereas, The sanitary condition of the city is not what it should be, particularly those portions bordering on the Delaware and Schuylkill Rivers; therefore, it is

Resolved, That the Sanitary Committee are hereby directed to cause a thorough sanitary inspection to be made of all market-places, wharves, docks, yards, courts, alleys, cellars, cesspools, and other places where filth is liable to accumulate and cause the spread of disease.

Resolved, That, to enable the Committee to carry out the first resolution, the Sanitary Committee be authorized to employ such additional assistance as may be necessary to make the inspection thorough and the work complete, all to be reported to the board and subject to their approval.

The resolutions were adopted. The Lazaretto physician, Dr. Robinson, reported that a brig which was detained at Quarantine with yellow fever on board had been thoroughly fumigated, and her crew were now in good health.

Dr. Richardson, who stated that a vessel laden with rags was on her way to Philadelphia from an Italian port, offered the following:

Resolved, That the special attention of the Quarantine officials be called to the transportation of Italian and Egyptian rags, in which it is possible that germs of cholera may be concealed, and thus enter this city.

This resolution also was adopted, together with another ordering that for the remainder of the quarantine season none of the Lazaretto officials should leave the station without the board's permission.

THE BOSTON CITY HOSPITAL.

In the annual report of the Board of Trustees, submitted to the Board of Aldermen on Monday of this week, it is stated that the net cost of maintaining the hospital has been \$7,702.01 more than last year. This has been mainly due to the higher cost of subsistence and general supplies, and was anticipated. The expensive outlay incident to the care of the sick does not allow retrenchment, without lowering the standard heretofore maintained. The expense is considerably below that of several other general hospitals, and can not well be diminished without being directly felt by the sick. Among other recommendations, the trustees name more ample accommodations for treating patients with infectious or contagious disease by isolation. The want of such room has caused the rejection of a large number, sometimes under conditions that were a hardship to the patient, or the friends, as well as a danger to the public health. The trustees express regret that the city council has not granted their repeated request for an appropriation with which to build a pavilion for nurses. This is the sixth year that mention has been made of it. The want of a suitable building has been the cause of much ill-health and inconvenience among the nurses; it would have supplied rooms for fifty more patients, and would have provided for the isolation of delirious patients, and those very ill or dying, who now can, as a rule, be provided for only in associate

wards. While the City Hospital is, and has been, foremost in many of the cardinal points of a good hospital, it is said to be far behind most others in its accommodations for those who nurse the sick.

"EVAPORATED" MILK.

THE Granulated Milk Company, which has a factory at Walton, in Delaware County, and a warehouse in New York, is said to be engaged in experiments with machinery and processes designed to reduce milk to the form of a powder. While thus engaged, it condenses milk by the process of evaporation, transports the product to town, adds water to the amount of loss, and sells the mixture, thus saving freight on a bulky commodity. On some occasions, more milk having been contracted for than could be treated to advantage in this way, the cream has been skimmed off and disposed of to makers of ice-cream, and the residue, skim-milk, has been sold to farmers to be fed to pigs and other domestic animals. This is the company's story. Some of the Board of Health's milk inspectors, however, have suspected that the skim-milk was condensed by evaporation, and then offered for sale as "whole" milk, and in consequence of this suspicion the officers of the company were summoned to appear before a Police Justice last week, on a charge of violating the sanitary code. The company professes to be able to give satisfactory assurances that it has not pursued the course with which it is charged.

THE BRITISH PASSENGER STEAMSHIP MEDICAL SERVICE.

LAST week a deputation from the British Medical Association, together with several members of Parliament, called upon the President of the Board of Trade and asked him to appoint a committee to consider the inadequate medical and sanitary management of Atlantic steamers. They commented upon the want of proper precautions on emigrant vessels, in consequence of which a large annual sacrifice of life resulted. They suggested that shipowners be compelled to increase the pay of ship surgeons, and that our Government be requested to contribute a small sum toward the expenses of vaccinating passengers. The President is said to have replied that he intended to introduce into Parliament in 1884 a bill dealing with the subjects mentioned and amending the Shipping Act.

THE AMBULANCE SERVICE IN JERSEY CITY.

WITHOUT undertaking to decide upon the merits of the case, we give the following statement from one of the newspapers: An Italian railroad laborer was struck by a locomotive Saturday afternoon and both legs were cut off. The injured man was brought to Jersey City in a train, and a telephone message was sent to the City Hospital for an ambulance. The authorities at the hospital asked what the case was, and, on being informed that a man's legs had been cut off, they demanded further particulars. Word was sent back from the railroad depot to send the ambulance down first, and then all the particulars that might be required would be furnished. This was refused, and the dispute was continued at intervals for three hours and a half. In the mean time the wounded man was lying in the depot. The ambulance was finally sent at half past nine o'clock.

SICKNESS AMONG HORSES IN CONNECTICUT.

LAST week we recorded an outbreak of pulmonary disease among horses in West Hartford. It now appears that within the past few weeks sixteen horses have died in Stamford from a disease which results in paralysis of the throat and hind parts,

The animal, it is said, crouches like a dog, is unable to stand, and soon becomes bloated and dies, after a few days' suffering, from exhaustion. Dr. Tanner, a veterinary physician, thinks that the disease is chargeable to atmospheric changes, and warns owners against fast driving and against watering horses while in a heated condition. The dissections show an inflamed condition of the intestines.

A NEW CASE OF COW-POX IN FRANCE.

A MILKMAID at Eysines having lately contracted a pustular eruption on her upper lip, the physician whom she consulted called the attention of the Bordeaux vaccination authorities to its nature. These gentlemen took some of the contents of certain pustules that they found on the teats of the cows on the place, and with it they inoculated a heifer in their *parc vaccino-gène*. The result was a lesion of tardy development, but supposed to be vaccinal. From it a second animal was inoculated, and undoubted cow-pox was the consequence. The Bordeaux Vaccine Institution therefore considers itself the possessor of an independent stock of cow-pox, although the criticism has been suggested that the punctures made experimentally may have become inoculated by accident, as the animals were allowed to run together promiscuously in the park.

A SUIT TO OBTAIN A DIPLOMA.

THE "Maryland Medical Journal" gives the outline of the facts in a suit lately brought against the faculty of the College of Physicians and Surgeons, of Baltimore, by a gentleman who came up for the degree in the class of 1883, but was among the rejected. It seems that he petitioned a court to issue a mandamus ordering the faculty to give him a diploma—on what ground, we are not informed. The faculty filed a demurrer setting forth that it had the right to withhold its diploma on any ground it saw fit to take: that in such a matter its action was not subject to judicial revision. The demurrer having been sustained, the case has been taken to the Court of Appeals.

CREMATION AND THE CHOLERA.

In view of the possibility of a European outbreak of cholera, the "Progrès médical" urges upon the authorities in Paris the importance of establishing crematories in three of the chief cemeteries of that city.

NEWS ITEMS.

THE RIBERI PRIZE.—The Royal Academy of Medicine, of Turin, says the "Gazzetta degli Ospitali," has given the Riberi prize of 20,000 lire to Professor Giulio Bizzozero, of the University of Turin, for the best essay on physio-pathology of the blood. Besides other Italians, the competitors included several distinguished English and French professors.

MR. JONATHAN HUTCHINSON, F.R.S., the "British Medical Journal" learns, is about to retire from the position of Senior Surgeon to the London Hospital, his term of office having expired. He has been appointed Emeritus Professor of Surgery in the Medical School, and will deliver a course of lectures on surgery each session. A "Hutchinson Testimonial" was resolved upon at a recent meeting of the present and former students of the school.

M. PASTEUR'S PENSION has been increased, says the "Lancet," from 12,000 to 25,000 francs, with reversion to his wife and children, the bill having passed the French Chamber without a division. In reply to certain dissentients, M. Paul Bert

cited the English grant to Jenner, and scouted the charge of sordid motives brought against Pasteur.

M. PASTEUR'S CHOLERA COMMISSION, to proceed to Egypt, will consist, it is said, of M. Roux and M. Thuillier, of M. Pasteur's laboratory; M. Strauss, of the Faculty of Medicine; and M. Nalaco.

DARTMOUTH MEDICAL COLLEGE.—The address introductory to the regular course of lectures was given on Wednesday by Professor Louis Elsberg, of New York.

THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY.—Dr. W. T. Sedgwick, of the Johns Hopkins University, has accepted the chair of biology at the Institute of Technology.

THE CARNEY HOSPITAL, BOSTON.—An entertainment was given in aid of the hospital on Thursday at Forest Garden.

THE MEATH HOSPITAL, DUBLIN, has been obliged to discontinue the use of one third of its beds for a time, according to the "British Medical Journal," for lack of funds.

THE "LOUISVILLE MEDICAL NEWS."—Dr. L. S. McMurtry has retired from the "News," and has been succeeded by Dr. H. A. Cottell, formerly an editor of that journal.

GLANDERS IN NEW JERSEY.—Health Physician Mandeville is reported to have found sixteen cases of glanders recently among the horses used on the Newark and South Orange horse railroad. It is said that the horses have been watered at public fountains.

A DISEASE AMONG CATTLE IN NEW HAMPSHIRE.—Seven deaths are reported as having taken place recently among cattle in the town of Stoddard, of a disease concerning which our only information is, that it proves fatal in from twenty-four to forty-eight hours.

MEDICAL EXAMINERS IN CONNECTICUT.—The corps appointed under the new law has lately been increased by the choice of Dr. W. S. Hulbert, of Winsted, for the towns of Winchester and Colebrook.

MARRIED.—At Cincinnati, O., July 26, 1883, by the Rev. Dr. Rowland, Professor Samuel G. Armor, of the Long Island College Hospital, Brooklyn, N. Y., to Mary T. Yorke, of Cincinnati.

OBITUARY NOTES.

M. AROHAMBAULT, OF PARIS.—The French journals announce the decease of this distinguished physician, who was well known in this country by his contributions to the literature of the diseases of children. He was a physician to the *Hôpital des Enfants*, and, like his master, Trousseau, was exceptionally successful with the operation of tracheotomy. His death was occasioned by a long and painful illness.

PROFESSOR FILHOL, OF TOULOUSE.—The death is announced of M. Filhol, the Director of the Medical School of Toulouse.

DR. JAMES BALDWIN, OF DANBURY, CONN., died recently, at the age of eighty-one. He retired from practice a few years ago.

BERNARD G. SEMIG, M.D., ASSISTANT SURGEON UNITED STATES ARMY.—Surgeon Semig died suddenly in San Francisco, on Wednesday, the 1st inst. He entered the army as Hospital Steward May 20, 1863, was discharged June 27, 1864, and appointed Medical Cadet July 2, 1864, serving in that capacity to April 5, 1865. November 10, 1874, he received his commission as First Lieutenant and Assistant Surgeon, and five years later was promoted to the rank of Captain. Surgeon Semig had a brilliant record. He lost a leg during the war with the Modocs.

Proceedings of Societies.

AMERICAN OPHTHALMOLOGICAL SOCIETY.

(Concluded from page 103.)

SYMPATHETIC NEURO-RETINITIS OCCURRING DURING PREGNANCY.—Dr. McKAY also reported this case. The patient was twenty-six years of age, and had been married ten months. In infancy she had scarlet fever, since which time the right eye had been weak. Five years ago the eye was treated for a painful inflammation by an oculist in Philadelphia, but during the last two years it had not annoyed her. When Dr. McKay saw her the eye was in a quiescent state of chronic irido-choroiditis, with partially occluded pupil and dense opacity of the vitreous. She complained of her left eye, and reported that after a week's crocheting a sudden pain was felt in it while looking at a white wall. She was debilitated by malarial and pulmonary troubles, and was three months advanced in pregnancy. Ophthalmoscopic examination revealed hypermetropia and a faint opacity of the deep portion of the vitreous, with decided congestion of the optic disc and retina. Within two weeks sympathetic neuro-retinitis was fully manifested, and vision was reduced to the ability to count fingers six to eight inches off in a dimly lighted room. After three months' treatment in a darkened room, with a dark bandage over her eyes, and the occasional use of a solution of atropine to prevent iritic adhesions, inunctions of mercurial ointment to the temples, several leechings to the left temple, and a general sustaining and tonic treatment, she improved in general health, the vitreous opacity as well as the exudation of the optic nerve and retina disappeared, and she recovered good vision. Her pregnancy, Dr. McKay thought, greatly modified the course of the sympathetic neuritis favorably. The ophthalmoscopic appearances of retinitis albuminurica were looked for repeatedly, but never found, and the fact of her vision not being again impaired while she had general anasarca, which developed later in the progress of the case, made him regard it as a case of neuro-retinitis.

THE DIFFICULTIES IN MAKING A DIFFERENTIAL DIAGNOSIS IN GLAUCOMA.—Dr. L. HOWE, of Buffalo, read a brief paper and presented a specimen. The patient was four months old. When first seen, at two months of age, a yellowish reflex was noticed in the interior of the eye, which had been previously somewhat reddened, and vision, so far as could be determined, was much impaired. Increase of tension was scarcely perceptible, but after some hesitation it was regarded as +1. After enucleation, it was found that the entire vitreous had contracted into a small cone as a result of previous inflammation, and that the apex touched the retina, having its interior filled with a semi-purulent yellowish substance.

COMMOTIO RETINÆ; OR SOME OF THE EFFECTS OF DIRECT AND INDIRECT BLOWS TO THE EYE.—Dr. E. E. HOLT, of Portland, Me., read a paper in which he reported four cases. In two of these the patient was struck more or less directly by a stick of wood, in one by a round rod or cane, and in the other by a flat piece of coal, striking the forehead, nose, and cheek, not hitting the eye itself. In three cases recovery was uninterrupted. In one there was a relapse. Vision was reduced to a perception of light for four days, after which it began to return, and in the course of two weeks became nearly normal. Relapse then occurred and vision sank, but not so low as it had been after the receipt of the injury. Recovery with a perfect eye took place much more slowly than at first. Dr. Holt gave a detailed history of this case, and also of one of the others.

The PRESIDENT remarked that Dr. Holt had reported four cases manifestly dissimilar in character. From a thorough study

of the affection referred to, he had become convinced that commotio retinæ was a phenomenon which had been entirely explained upon the supposition of a fissure running through the optic foramen of the orbit, and was almost entirely a mythical supposition by itself.

Dr. SEELY thought the subject could not be dismissed so summarily as Dr. Noyes had supposed. He had reported one case which could not be explained away so readily, because a single application of electricity restored a vast amount of vision, and there was no explanation of the extreme lowering of the vision from which the patient suffered.

The paper was further discussed by Dr. KIPP, Dr. GRUENING, Dr. KNAPP, Dr. WADSWORTH, and Dr. McKAY.

TWO CASES OF OPHTHALMOPLÉGIA EXTERNA, ASSOCIATED WITH DISEASE OF THE OPTIC NERVES FROM BRAIN TUMOR, WITH AN ACCOUNT OF THE POST-MORTEM EXAMINATION.—A paper with this title, by Dr. CHARLES STEDMAN BULL, of New York, was read by title, and referred to the Committee on Publication. [Dr. Bull's paper will be given in a subsequent number of the journal.]

INJURY TO THE EYES BY HANGING.—Dr. F. B. LORING, of Washington, said that since the series of experiments reported by Dr. Dyer he had seen no communications concerning the effect produced upon the eyes by hanging, except the case reported by Dr. Green, of St. Louis, which was not corroborative. He had had an opportunity to observe one case, which he wished to place upon record. In that instance both eyes were affected, but the one not so markedly as the other.

Dr. GREEN remarked that his case was not corroborative of Dr. Dyer's conclusions in a certain sense; but he did not consider it valuable either as corroborative or otherwise, because the time afforded for examination after the execution was too short, not being more than one hour.

Dr. HOWE referred to one case in which he examined the eye thirty-five minutes after the execution, and was unable to see any change.

Dr. R. H. DERBY referred to three cases which he had already reported in which there were marked changes in the eye produced by hanging.

COLOBOMA OF THE CHOROID.—Dr. McKAY, of Wilmington, wished to place on record three cases. In one there was coloboma of the iris. Two cases occurred in children, aged, respectively, seven and ten months. The other occurred in a woman twenty-eight years of age. In the child seven months of age coloboma of the iris occurred.

AN IMPROVED BANDAGE.—Dr. THEOBALD, of Baltimore, presented an additional modification of his bandage, which he regarded as a substantial improvement. It consisted in cutting the eye-piece "bias," in order to prevent the tendency to wrinkling.

POWDERS FOR APPLICATION TO THE EYE.—Dr. MITTENDORF called attention to a new method of applying remedies to the eye, namely, in the form of impalpable powders or triturations. He presented several specimens of remedies prepared in this way.

The PRESIDENT remarked that he had employed homatropine prepared in this way, and had been well pleased with the preparation.

Dr. JONES asked if this method was preferable to the discs prepared by Savory and Moore.

THE PERMANENCE OF ESERINE SOLUTIONS.—Dr. WADSWORTH spoke of the loss of power in solutions of eserine. Recently he had found a solution which was three years old, and it still worked perfectly well.

Dr. SEELY, of Cincinnati, said that for ordinary purposes he preferred an old solution of eserine to a fresh one.

OFFICERS FOR THE ENSUING YEAR were elected as follows: President, Dr. H. D. NOYES, of New York; Vice-President, Dr. WILLIAM F. NORRIS, of Philadelphia; Secretary and Treasurer, Dr. R. H. DERBY, of New York; Publication Committee, Dr. E. G. LORING and Dr. D. B. ST. JOHN ROOSA, of New York.

The next annual meeting will be held at the same place, on the third Wednesday in July, 1884.

NEW YORK SOCIETY OF GERMAN PHYSICIANS.

A STATED meeting was held October 27, 1882, Dr. F. SERR in the chair.

REMOVAL OF AN ANEURYSMAL TUMOR OF THE ORBIT.—Dr. H. KNAPP presented a specimen of aneurysmal tumor of the orbit, recently removed by operation from a female patient who, eight years previously, had met with a fall, the consequence of which was a hæmorrhage into the orbital cavity, followed by protrusion of the eyeball. The patient subsequently had severe headaches, and a cirroid aneurysm had gradually developed over the whole left half of the head. Coincidentally with the formation of cataract and the development of a high degree of exophthalmus, the eye had become almost completely blind during the past three years. Perception of light still remained. The patient also complained of very annoying noises in the ear. Two years ago Dr. Sands had ligated the carotid, securing primary union, and since then the noises had ceased, and the aneurysm had undergone a complete retrograde development. The exophthalmus, however, had not only persisted, but had increased, the cornea had sloughed, and the eye had been lost by panophthalmia. At the inner canthus of the eye, and in both eyelids, a congeries of pulsating blood-vessels were visible. Two weeks ago Dr. Knapp had enucleated the eyeball without encountering any special difficulties, as he had been careful to keep close to the sclerotic and not to invade the orbit. On removal of the globe, the whole cavity of the orbit was found to be filled up with a pulsating mass, which imparted a firmly elastic resistance to the touch, and which sent out two prolongations—one to the upper and one to the lower lid. Since there were cases on record of the successful removal of similar growths from the orbital cavity, he had attempted extirpation in this case with entire success. He had opened into the orbital cavity at the outer angle, and penetrated along the roof until, reaching the apex of the space, a pulsating vessel of the size of the little finger was encountered, which, being compressed, caused all pulsation in the tumor to cease at once. The tumor was easily raised from its bed by means of fingers and scissors, and separated as far as its pedicle, only one vessel requiring ligature. The large vessel above mentioned, which constituted the pedicle of the tumor, was, after ligation, accidentally divided *in front of the ligature*, but, strange to say, not a drop of blood was observed to flow from the patulous mouth, which, as stated, had a caliber of the size of the little finger. The cavity was now lined by a gold-beater's skin, and filled with absorbent cotton. Healing took place, with complete asepsis, the secretion being merely serous. It was a very difficult matter to find a satisfactory explanation for the absence of hæmorrhage from the central portion of the severed vessel. During the operation hæmorrhage was avoided by his confining himself to working with the scissors, guided by the finger, between the capsule of the growth and the periosteal lining of the orbit. In answer to a query by Dr. Gerster, the speaker stated particularly that the periosteum had not been removed with the growth. Neither did he agree with that gentleman's suggestion, that, as ligation of the carotid had preceded the operation, there might be reason to suppose that the vessel contained in the pedicle of the

tumor was a deferent and not an afferent one, so that the vessel had, in fact, been properly divided behind the ligature. The circumstance that compression of that vessel had cut off the blood supply and stopped the pulsation in the tumor was proof conclusive against the argument.

CAVERNOUS ANGIOMA OF THE TONGUE.—Dr. A. FRIDENBERG presented a case of cavernous angioma of the tongue occurring in the person of a young married woman. The growth had originated in the shape of a small blue speck on the tongue when the patient was two years of age. It had grown slowly but steadily, being strictly confined to the median line, until it now occupied the whole left half of the organ, which was three times the size of the other half, of a dark-blue color, tense and elastic in feel, and easily emptied of its contents by compression. At the tip of the tongue the process had invaded the right half, and similar foci of telangiectatic development were discernible on the left half of the soft palate and on the buccal mucous membrane, extending forward as far as the first molar tooth. Two days before each menstrual epoch the patient had noticed an increase in the size of the tongue, always attended by slight dysphagia, until the flow was well established. At the left angle of the lower jaw an elastic swelling, the size of a small hen's egg, could be felt, easily diminished by pressure; this was evidently the root of the tongue, presenting the same condition as the rest of the organ. The speaker inquired whether ligation of the left lingual artery were not indicated as a means of cure?

Dr. JACOBI said that, as the angioma was supposed to be venous in character, he failed to see the benefit to be derived from ligation of the artery. In cases of cavernoma of the extremities, ligation of the principal afferent arteries had been found useless. If, in this case, the carotid had not already been ligated, he would suggest experimental compression of that vessel. Should this result in collapse of the swelling, it would then be eminently proper to apply the ligature. He would, however, recommend the destruction of the growth by puncture with needles at a black-red heat.

Dr. GLUECK asked whether there was any direct indication requiring the removal of the tumor. He had had a patient, seventy-two years of age, the subject of a very similar growth, which had never given any trouble.

HERPES ZOSTER.—Dr. H. C. KLOTZ presented a portion of integument of the mammary region, removed from the body of a man who had succumbed to general tuberculosis two days previously. Shortly before death a crop of vesicles had made their appearance, attended by severe pain, in this region. Nervous influences were evidently concerned here, and the local process had not run its course when death had supervened.

Dr. SCHARLAU showed a FÆTUS IN THE FIFTH WEEK OF EMBRYONIC DEVELOPMENT.

LITHOLAPAXY.—Dr. GERSTER showed the débris of a uric-acid calculus weighing fifteen grammes, which had been removed at one sitting by Bigelow's method of litholapaxy. The patient, a man, fifty-three years of age, had been able to evacuate his bladder immediately after the operation, which had lasted about seventy minutes, had passed urine quite free from blood on the following day, and had been dismissed, cured, from the Mount Sinai Hospital, a week later. The stone showed a multinuclear structure. One of the fragments, of the size of a pea, had become lodged in the eye of the evacuating tube, requiring the temporary withdrawal of the instrument.

BLEPHAROPLASTY BY TRANSPLANTATION OF SKIN FROM THE ARM.—Dr. E. GRUENING reported a case of blepharoplasty of the upper lid for ectropium, resulting from a burn, the flap for which had been entirely removed from the bicipital region of the arm. In accordance with a recommendation to select a flap two and a half times the size of the surface to be covered, he found his

flap almost twice as large as necessary. The preparation of the flap by the removal of all the subcutaneous adipose tissue was completed before severing its attachment to the arm. The transferred flap was not sutured to the lid, but merely placed accurately *in situ*, and covered with very fine gold-beater's skin.

Dr. GERSTER remarked that, as a general thing, it certainly was preferable in plastic operations to cut the flap too large rather than too small. A flap that was so small as to require any degree of tension to adjust it to the space intended for its reception was almost certain to slough, whereas the remaining portion of a flap that had been too liberally planned could readily be converted to further use. The speaker instanced the case of Wiensfeld, a patient at the German Hospital, from whom both eyelids, the eyeball, the orbital tissue, a large portion of the cheek and of the superior maxilla, and half of the nose, had been removed for epithelioma involving these structures. The resulting ghastly deformity was relieved by bringing down two large curved flaps out of the integument of the forehead, one serving to construct the upper lid, the other for a partial rhinoplasty. When the flaps had firmly united, the redundant portions of integument were employed, one to form a partial covering for the defect in the forehead, and the other in the construction of the lower lid.

Dr. SCHAPRINGER remarked that the relative amount of shrinkage in flaps varied according to the age of the patient, and that, therefore, no general rule could be established.

Dr. KNAPP was not enthusiastically in favor of the method. The results were not encouraging. In the majority of cases a flap that had had its connections severed would slough. The object in removing every particle of subcutaneous tissue from the flap was for the purpose of bringing the rete in direct contact with the denuded surface.

Dr. J. A. WYETH reported a case of interest in connection with the subject, in which a flap measuring 7" by 2" had been prepared to cover a defect in the integument of the leg resulting from phlegmonous gangrene. The whole flap had sloughed. He recollected a case, occurring at the clinic of Professor Thiersch, in which the nutrition of the flap had been stimulated before complete removal by pinching the skin until hyperæmia was developed. In this case, also, sloughing took place. When large flaps were employed, favorable results were exceptional.

A. G. GERSTER, M. D.,

Secretary.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

A STATED meeting was held March 1, 1883, the President, R. A. CLEEMANN, M. D., in the chair.

DOUBLE ENUCLEATION OF UTERINE FIBROIDS.—Dr. W. GOODELL presented the specimens and reported the case. Mrs. B., a Hebrew lady, aged thirty-eight, and the mother of five children, the youngest five years old, began, early in 1880, to have menorrhagia and difficult micturition. Afterward, her physician, Dr. A. H. McAdam, discovered a uterine fibroid. In January, 1881, Dr. Goodell was called in to see her. He confirmed the diagnosis, and found a fibroid in the anterior wall of the womb, bulging out the anterior lip of the cervix, which was greatly hypertrophied, but not at all enlarging the os. The sound gave a measurement of six inches. As all remedial measures wholly failed, he admitted her into his private hospital, and, on February 6th, cut into the tumor by means of Adams's subcutaneous saw, and by enucleation removed most of it. A month later the fragment left behind descended low enough to be removed without difficulty. The tumor weighed not quite two pounds. At the time of this last operation a small fibroid was discovered in the posterior wall of the womb, but it was too high up to be attacked.

Her convalescence was prompt, and her monthly flux became natural. On October 6th the sound gave a measurement of only three inches, and she felt well. But in the following March she again sought his advice for a return of the menorrhagia. A fibroid was now bulging out the posterior lip of the cervix, but not expanding the os. The uterine cavity measured five inches. As all remedies again failed, enucleation was once more proposed, and, on February 28, 1883, the operation was performed for the second time. The posterior lip of the cervix was cut open by the saw without invading the uterine cavity, and, after an hour's hard work, a tumor weighing one pound and a half was taken away in fragments. Several very beautiful and perfect fibroids, as large as a pigeon's egg, were also removed. They were attached to the capsule of the mother tumor merely by loose connective tissue. About a pint of blood was lost during the operation, but after the removal of the tumor the hæmorrhage ceased, and the cavity left behind was not tamponed. The patient is doing very well, although the shock was somewhat profound.

In commenting upon this case, Dr. Goodell remarked that the to-and-fro linear movement of the saw made it a very efficient instrument for working in narrow channels, and that it had the further merit of lessening the amount of hæmorrhage. He now used no other instrument for incising the capsule of fibroid tumors. The history of this unique case had somewhat shaken his confidence in the operation of enucleation, because, since the womb was affected usually with multiple fibroids, some one of these must invariably be left behind, and a second operation might become needful. He believed that in these cases oöphorectomy, as a safer and surer remedy, had a future before it. He had, in fact, performed the operation four days ago on a lady who was so feeble from prolonged hæmorrhage that he did not dare to remove the fibroid by enucleation, which was a more prolonged operation, and attended by a greater loss of blood. She was doing very well indeed. For the same reason, not daring to enucleate, he had early last year removed both ovaries for a bleeding fibroid, but after a remission of several months the hæmorrhage returned, and he would probably have to perform enucleation or hysterectomy.

Dr. B. F. BAER inquired if the tumor in the case in which hæmorrhage returned after oöphorectomy was not of the submucous variety? Ought not the operation to be limited to the interstitial and subperitoneal varieties, where enucleation was not possible? In one case reported by Dr. Byford, of Chicago, a uterine (submucous) fibroid had gone on increasing, and hæmorrhage had continued after oöphorectomy.

Dr. GOODELL, from *a priori* reasoning, would expect less favorable results in submucous tumors, as they were more like polypi in their character, and would be more likely to continue to bleed. The tumor referred to, for which oöphorectomy had failed, was of the submucous type, and could have been removed by division of the mucous membrane and enucleation had the patient's condition permitted it.

INDUCTION OF PREMATURE LABOR FOR THE RELIEF OF SUPPRESSION OF URINE.—Dr. B. F. BAER narrated the history of a case in which this procedure was considered necessary. The case occurred in the practice of Drs. Marcy and Meera, of Cape May, N. J. About the sixth month of pregnancy a general œdema was noticed, and the urine contained considerable albumin and a few casts. The amount of urine passed diminished rapidly while the proportion of albumin increased, and the patient became weak and anæmic. Every means was tried to increase the quantity of urine, but without avail. Among the remedies used were a wide range of diuretics and hydragogue cathartics, with Basham's mixture. A sudden suppression of urine occurred at eight months, and but four ounces were passed

in forty-eight hours; this became solid when heated; headache and spots before the eyes were now added to the other symptoms, a grumous discharge from the uterus had been noticed for a week, and convulsions seemed threatening. Dr. Baer was called in consultation, and he agreed with them as to the advisability of inducing premature labor. A No. 9 flexible catheter was warmed and softened, and was, after great difficulty, introduced between the membranes and the anterior wall of the uterus. The cervix uteri had been lacerated in a previous labor, and was hard and small. Pains of a natural character followed immediately upon the introduction of the catheter. After some hours the pulse became weak and the patient faint, the os was but slightly opened, and it was considered advisable to administer stimulants, use Barnes's dilators, and the Hodge forceps; a dead child was speedily extracted. The latter had been alive in the morning. Four hours after delivery, urine was secreted, and in two days the albumin had entirely disappeared. The patient recovered.

INDUCED PREMATURE LABOR FOR GREAT ŒDEMA OF THE LABIA MINORA.—Dr. D. F. WILLARD reported the case of a patient, probably over forty years of age, who had been married about one year, and was pregnant with her first child. She suffered from headache, her feet and eyelids were swollen, and her urine showed one sixth albumin and contained casts and blood-corpuscles. Basham's mixture, diuretics of every kind, diaphoretics, hot-air baths, hydragogue cathartics, and tonics were used without a satisfactory result. Digitalis infusion and jaborandi alone gave a very temporary relief. The patient, soon after her first visit, called attention to the condition of the labia minora, which were found to be enormously swollen, shining, tense, and pitting on pressure. The urine amounted to from fifteen to thirty ounces daily, and steadily decreased in quantity. The œdema of other portions of the body decreased under the use of digitalis, but that of the labia increased. The patient could lie only upon her back with her knees drawn up and as widely extended as possible; the pain was great and constant; lancet punctures were made with temporary relief. The patient was steadily failing; her pulse was 150 per minute. An erysipelatous blush made its appearance and rapidly spread to the abdomen and thighs. Premature extraction of the child offered the only chance, and was at once performed. Gestation had reached eight months. It was a difficult task, as the labia were five inches in depth. Barnes's dilators and the Hodge forceps were used, and delivery was accomplished in two hours. The child was dead, and the mother died three hours later.

W. H. H. GITHENS, M. D., *Secretary.*

Reports on the Progress of Medicine.

OBSTETRICS AND GYNÆCOLOGY.

By ANDREW F. CURRIER, M. D.

ACTIVE INTERFERENCE IN ABORTION.—Spöndly's paper ("Ztschr. f. Geburtsh. u. Gynäk.," ix, 1) is mainly a collection of fifty-three cases in which abortion occurred, in all of which there was a favorable issue. He offers nothing new, and only lays down those rules and precautions which every careful obstetrician would naturally follow. It is not a new idea, though a sound one, to recommend the complete removal of all the products of conception from the womb when an abortion has occurred. He thinks this can usually be done with the finger, in case the canal is sufficiently dilated to admit it. Hence the

necessity of interference very soon after the fœtus has been expelled, and of not waiting for the secundines to come away without assistance.

THE DURATION OF LABOR.—Lumpe ("Centralbl. f. Gynäk.," May 19, 1883; from "Arch. f. Gynäk.,") says that in the calculation much depends upon fixing the time accurately when labor begins. Since there is so great a difference in the disposition as well as in the age and constitution of child-bearing women, it is hardly accurate to fix upon the first pains perceived subjectively as the beginning of labor in all cases. The condition of the cervix is a most important element in the calculation; indeed, the principal question is whether the cervix dilates before labor has begun. Two separate processes relating to the cervix are to be considered: 1. The opening of the cervical canal, which is the result of the so-called œdema of pregnancy. Any sort of irritating process at any period of pregnancy may produce this opening, and complete closure may result without interruption of the pregnancy. Normally, the opening and moistening of the cervix, which end in dilatation, occupy from eight to fourteen of the last days of pregnancy. 2. The dilatation of the cervix, which can not be the simple consequence of the œdema of pregnancy, but is always the results of uterine contractions. It leads, under all circumstances, to the termination of pregnancy. The author believes that a thorough knowledge of the physiological limits of labor, and particularly of its beginning, will prevent any unnecessary and premature interference with its normal progress.

CERVICO-VAGINAL RUPTURES IN THEIR OBSTETRICO-FORENSIC SIGNIFICANCE.—Bayer (*ibid.*) observes that incomplete ruptures of the uterus, rents of the cervix and vaginal wall, without involvement of the peritonæum, are events which present great dissimilarities as to degree and as to significance. Two cases are reported, both occurring in multiparæ, in which the cervix was torn on the right side as far as the os internum, and the peritonæum was raised, but not torn, in a direction pointing toward the right kidney. Death followed in twelve hours in one case, from post-partum hæmorrhage; in the other, in two days, from septicæmia. The raising of the peritonæum on the right side in these and in other reported cases is noteworthy, especially since the majority of ruptures of the cervix are upon the left side. In the first case, turning, and extraction with forceps, in a placenta prævia patient had been practiced; in the second, the birth had been spontaneous in the normal position. The medico-legal question, in the author's mind, was based upon the hypothesis that the second case was also one of instrumental delivery. On this supposition there would have been two identical accidents, both followed by a fatal result, and a fair inference would be that undue force or a lack of skill had been shown, which might have been a ground for prosecution. This was impossible, however, from the fact that there was no instrumental interference in the second case, and the fault in both cases might, therefore, be attributed, so far as the peeling up of the peritonæum was concerned, to anatomical peculiarities relating to the fixation of the pelvic peritonæum in its bed.

THE TREATMENT OF POST-PARTUM HÆMORRHAGE.—This note of Dr. Barnes's ("Lancet," Jan. 27, 1883) was suggested by a recent article by Mr. Coates on "Two Cases of Intra-venous Injections of Fluids for Severe Hæmorrhage," in which it was shown that injections of simple water had no bad effect upon the blood globules. He approves of this method of treatment, but thinks that saline injections are better. It is especially necessary to have a good cannula. As might be expected, he has something to say in regard to the use of iron solutions for the arrest of post-partum hæmorrhage. The principle which he insists upon is that, when the diastaltic function of the heart is suspended, "persistence in remedies which act through that

function is useless, and may be injurious"; hence a local styptic action is desirable, and it is obtained from solutions of iron. He believes in strong solutions, but not in caustic ones, of the perchloride and persulphate, one to eight being the strength which he prefers. His concluding words are very valuable: "The first thing to do is to take care that the uterus is free from blood or clots. To insure this, a stream of hot water should first be sent through. This is a last appeal to the diastaltic force. If it check the hæmorrhage, the iron will not be used. But often it will fail; then the iron comes to the rescue as the last resource. About eight ounces should be injected slowly and gently. I have well weighed the advantage of swabbing, and prefer the method by injecting. With those who see no danger in hæmorrhage, or who urge that it can always be checked by 'ordinary means,' it is useless to reason. Nor can the dictum that the remedy is worse than the disease command respect. Hæmorrhage kills if not checked. It has often killed when the 'ordinary means' have failed."

ON DANGEROUS HÆMORRHAGE FROM THE EXTERNAL GENITAL ORGANS DURING AND AFTER LABOR.—Dr. Peter Young's paper ("Edinburgh Med. Jour.," March, 1883) was read before the Edinburgh Obstetrical Society at the session of January 31, 1883. The author prefaced his remarks with the statement that dangerous or even fatal hæmorrhage occasionally occurred after parturition, even when the womb was well contracted. This accident arose in such cases, not from the uterine sinuses, but from lacerations of the cervix or the external genitals. Two cases illustrating this point were given. In the first case the patient was practically lifeless when first seen, and all efforts to rouse her were ineffective. The autopsy showed that the uterine sinuses were effectively sealed with clots. There were several slight rents in the cervix. On the anterior wall of the vagina there was a tear five eighths of an inch long, which extended upward from the left side of the urethra to the left of the clitoris. The wound was seven eighths of an inch deep, of a spongy appearance, and revealed not only a divided plexus of veins, but some small arteries as well. In the other case the wound was also in the region of the vestibule. It was discovered seasonably, and the patient was saved. Winckel is quoted as to the possibility of injury to the nymphæ and labia majora during parturition, even without rupture of the perinæum, but the neighborhood of the vestibule seems to be a more common, as well as a more dangerous, locality. The accident may be caused by the simple pressure of the child's head, especially if the tissues are friable, or otherwise without resisting power, or it may be caused by the interference of the accoucheur. As it is likely to occur when only the head of the child has been expelled, the existence of profuse hæmorrhage at such a moment should suggest this accident. If, after ocular examination, it is found that it has taken place, it should be treated at once by pressure in the most convenient and suitable form which can be devised at the time. It will often be desirable to apply pressure temporarily, and subsequently pass one or more sutures through the wound.

PRECOCIUS HYSTERIA.—Greffier ("Centralbl. f. Gynäk.," June 2, 1883; from "Arch. gén. de méd.") thinks that the beginnings of hysteria antedate puberty in more cases than is commonly supposed; indeed, he thinks that menstruation has no real influence upon the development of the disease. The clinical picture of hysteria does not differ, whether the subjects are children or adults, both types presenting the same psychological phenomena, and the same sensory and motor disturbances. The usual ovarian symptoms, too, are not wanting in hysterical children, the trouble being referred to the left side. Whether these so-called "ovarian symptoms" have anything to do with the ovaries is to be questioned; at any rate, Richer reports the case

of a twelve-year-old hysterical boy who had them well developed. The treatment recommended for these cases is hydrotherapeutics.

DISEASES OF GARTNER'S CANALS.—Böhm ("Centralbl. f. Gynäk.," May 26, 1883) considers that a pathological interest attaches to these functionless remnants of foetal life, in that they may become diseased, either independently, or in connection with inflammations of the vagina, vulva, or urethra. This fact has been observed by him in a number of cases, the canals having undergone a sort of diverticular dilatation, while they were discharging a more or less abundant secretion, of the consistence of cream. The edge of the orificium urethræ also showed evidences of inflammation, as well as the gland-containing depressions in the mucous membrane surrounding that orifice. The treatment consisted in the application of astringent solutions, and in one case it was found necessary to divide the tissues. The trouble is likely to be confounded with gonorrhœa, especially when the canals open into the urethra.

THE STATE OF THE UTERINE MUCOUS MEMBRANE DURING MENSTRUATION.—Besides Wyder ("Ztschr. f. Geburtsh. u. Gynäk.," ix, 1), the names of Kundrat, Engelmann, Williams, Leopold, Mörcke, and de Sinéty may be mentioned among those who have made investigations upon this subject. All of them agree that the uterus is deprived of its epithelium during menstruation, and is converted into a wound-like surface. The disagreement is as to the extent of the exfoliation. Williams concludes that there is a complete loss of the mucous membrane of the uterine body, and a laying-bare of the muscular tissue. Kundrat, Engelmann, Leopold, and the author are of the opinion that only the superficial layers of the mucous membrane are shed. The four authors first mentioned believe in a fatty degeneration of the menstrual mucous membrane, all but Leopold considering it as the primary and principal factor in producing the hæmorrhage, while Leopold, on the other hand, considers it (the fatty degeneration) as secondary to and dependent upon the hæmorrhage, the latter being caused by excessive dilatation of the capillaries of the uterine mucous membrane, with relative insufficiency of the veins. Regeneration takes place, according to the author, from the layers which have not been shed, and which are in a condition of cell hyperplasia. Neither Mörcke nor de Sinéty admits that there is loss of mucous membrane during menstruation, or fatty degeneration, to a very great degree, the process being largely limited to congestion and diapedesis. The author proceeds to the analysis of eight cases, with special reference: 1. To the condition of the superficial and glandular (uterine) epithelium; 2. To the kind of hæmorrhage which occurs during menstruation and the method of its occurrence; 3. To the condition of the mucous tissue, particularly the interglandular substance. He accords to Mörcke the credit of having established the following points: 1. That during menstruation a portion of the mucous membrane of the body of the uterus is undisturbed; 2. That the teaching of Kundrat, Engelmann, and Williams concerning a primary fatty degeneration of the uterine mucous membrane is no longer tenable; 3. That the superficial and middle layers of this membrane do not suffer conversion into a decidua. His own views are summarized as follows: 1. During menstruation a portion of the superficial layer of the mucous membrane disappears, the rest remaining. This shedding process varies in extent in different cases, now involving the entire superficial layer (Leopold, Wyder), again taking only a small portion of it (Spiegelberg). The elements which are thrown off are partly detritus and partly undecomposed matter. In some cases, as in dysmenorrhœa membranacea, small mucous shreds are found, which, however, are too small to cause dysmenorrhœa. 2. This process of shedding is caused by the hæmorrhage of menstruation, and not by primary fatty de-

generation. 3. The superficial and middle layers of the mucous membrane, which are left behind, show an abundance of small cells, but no similarity to the decidua of pregnancy. The deepest layers show a cell-hyperplasia of the interglandular tissue, the evident mission of which is to furnish a supply for the tissue which is lost during menstruation. 4. The degeneration of the superficial epithelium is participated in, as well by the glands as by the surrounding membrane in which they are embedded.

MANGANESE IN THE TREATMENT OF AMENORRHOEA.—Dr. S. Ringer and Dr. W. Murrell ("Lancet," Jan. 6, 1883) have been using permanganate of potash extensively, in hospital practice, for amenorrhœa, with good results. They have used it both in the pharmacopœal (B. P.) solution and in the form of one- or two-grain pills. One grain three times a day is given to begin with, and this is increased to two grains four times a day, the larger doses giving the best results. Its administration should be begun three or four days before the period is due, and, if it is not successful in bringing on the flow, its use should be continued for some time, even until the next period is due, if necessary. It should not be discontinued as soon as the flow appears, as its use will facilitate that process. Its action is not so certain in the case of girls who have never menstruated, though, after having been tried unsuccessfully, it may be successful if tried at a subsequent period. It is also recommended in the case of women who have reached middle life, have passed through numerous pregnancies, and have become irregular. It is necessary to avoid giving it during pregnancy for any cause, though it is not known that it will produce abortion. In the amenorrhœa of phthisis it not thought to be of value. The pills will usually be found to be more acceptable to the patient, as to any disagreeable after-effect, than the solution. Manganate of sodium and binocide of manganese are equally effective with the permanganate of potash. Manganese does not seem to improve the condition of the blood in anæmia and chlorosis, but acts equally well with the plethoric and the anæmic.

OFFENSIVE CATAMENIAL DISCHARGES.—Dr. Wiltshire ("Med. Times and Gaz.") remarks that menstrual discharges commonly have a peculiar but not an offensive odor, the former being due to the secretions of the glands around the vulva, the latter being an evidence of disease. Especially in the discharges of chlorotic women is this peculiarity noticeable, the blood of such people being readily subject to decomposition, and its greenish color being due to altered coloring material. The mechanical retention and decomposition of clots, in cases of stenosis or flexion, are also causes of putrid menstruation, and to these may be added subinvolution. Still other cases are caused by some disease of the endometrium, often of a malignant character. Then is the time when a developing uterine cancer can be best treated. The general treatment for such a condition consists in the proper use of disinfecting astringent solutions.

UTERINE IRRITATION AND UTERINE MOVEMENT.—Runge ("Centralbl. f. Gynäk," May 26, 1883) says that the value of hot water in producing uterine contraction being so well recognized, it occurred to him to make a series of experiments, in order to test also the efficiency of cold as an irritant to the uterus. Very young pups were selected for the experiments. The abdominal cavity was carefully opened, and the uterus presented a pale-red appearance. Water at 5° C. was then poured into the cavity, covering the uterus, which suddenly became rigid, and of a slightly deeper color. This tetanic condition lasted about a minute, after which the organ returned to its former condition, but manifested a few weak contractions. More water being added, so as to keep the uterus in a medium with a temperature of 5° C., the condition of contraction of that organ continued for from ten to fifteen

minutes; the color became a deeper red, the vessels dilated and filled with blood, while the muscular tissue became very pale. After half an hour the muscular tissue became redder and more relaxed, and the uterus returned to its normal condition. Further irritation being applied, of a mechanical, electrical, or thermal nature, marked uterine contractions followed, showing that the irritability of the organ had not been exhausted by the action of the cold. Identical results followed the application of cold to the rectum. If the experiment was repeated at a temperature of 50° C. during a period of ten minutes, the uterus gradually became flaccid, and reddish-blue in color. Cold or electricity being then applied, the uterus showed no irritability. Even strychnine applied at this high temperature caused no contractions, or none of any force. The action of cold in these experiments, therefore, was to produce a long-continued and firm contraction of the uterus, with no intercurrent stage of paralysis; this stage was reached only when the temperature exceeded 40° C. If the same conditions obtain in man as in animals, this would seem to prove that cold is more effectual as a hæmostatic than heat. In obstetric practice, while cold water would undoubtedly stop the hæmorrhage in a patient anæmic to the verge of collapse, it would precipitate the latter condition. Hence hot water is almost universally preferred in the exhausting hæmorrhages of parturition. The author suggests, *en passant*, the very useful precaution against pain and accident, in the use of hot water, that the entrance to the vagina and the vulva be well smeared with carbolized oil. In gynecology, hot-water injections are certainly more grateful to the patient, and their power of producing absorption is far greater than that of the cold. Hence, whether cold or hot water is to be employed depends upon the exigencies of the case. Both act as irritants to the uterus, and will produce contractions.

SUBINVOLUTION OF THE UTERUS.—Williams ("Brit. Med. Jour.") says that, by the investigations of Heschl, who took a series of measurements of the uterus in the cases of women who had died at different periods after delivery, it was ascertained that the greatest loss of weight occurred in the second week after that event. There are elements of uncertainty in such methods of calculation which, the author thinks, can be remedied by the systematic measurement of the uterine cavity in the living subject with the sound, in connection with the bimanual method of examination. In one hundred and thirty cases in which he made examinations he found that there were ninety-six in which the uterus had contracted back again into the cavity of the pelvis on or before the twelfth day of the puerperium. The process of involution goes on more rapidly with young multiparæ than with primiparæ, and more rapidly with the latter class than with old multiparæ. The duration of labor has no influence upon the process, but post-partum hæmorrhage and retention of the secundines have a bad influence, as does also rupture of the perinæum. The author thinks that rupture or laceration of the cervix has no influence, good or bad, upon the process. In some cases of puerperal fever and pelvic peritonitis, involution is not interfered with, in others it is delayed. The influence of suckling and early getting-up is not yet decided in the author's mind, though he thinks the recumbent position well adapted for drainage, and approves of the use of disinfecting solutions as vaginal injections.

A CLINICAL CLASSIFICATION OF BACKWARD DISPLACEMENTS OF THE UTERUS.—Dr. Heriman ("Lancet") remarks that backward displacements of the uterus occur chiefly in cases in which there is relaxation of the muscular tissue of the pelvic floor, and particularly among women who are inclined to inflammatory and other diseases of the pelvic organs. The uterus being displaced, the venous flow is obstructed, and the uterus then

becomes congested. The following classification is made: 1. Those cases in which the patients experience no discomfort, which, according to Vedeler's statistics, amount to about 16.49 per cent. of all women. 2. Those in which the only symptoms are those of prolapse—namely, pain in the region of the sacrum and bearing-down pains, trouble in urination, constipation, vaginal catarrh, occasionally, but no menstrual disturbances. With women who are thus affected, the symptoms disappear when they lie down, and mechanical treatment, by means of a pessary, is often signally successful. 3. Those in which congestion of the uterus has occurred, and the phenomena resulting from that condition include menstrual disturbances. If the congestion is the result of pressure upon the veins, due to backward displacement, the raising and anteverting of the uterus with a pessary will produce a good effect. If, however, the congestion is only an accompaniment, or, it may be, the cause of the displacement, then a hard-rubber pessary will only increase the congestion; a soft-rubber ring will do much better service. 4. Those cases which are complicated with other diseases. In these, help is often afforded by means of a pessary, if the uterus is movable.

THE DEVELOPMENT OF UTERINE MYOMATA.—Kleinwächter ("Ztschr. f. Geburtsh. u. Gynäk.," ix, 1) thinks this process is not yet fully understood. Virehow's opinion is that an excessive enlargement of muscular fibers, as a rule, does not take place, but there is a conversion of round cells into spindle cells, and these can not be distinguished from organic muscular fibers. The question remains as to whether the round cells are developed from the connective tissue or from divisions of the muscle cells. Förster believes in the division of the muscle cells, but admits the possibility that a new growth may proceed from connective tissue. According to Klebs, the formation of muscular tissue proceeds at a parallel rate with the development of vessels, and the consequent more abundant supply of nutrition. According to the author, the best specimens for the study of this subject are very small growths in which proliferation is actively progressing. In these pure myomata, or fibro-myomata, the connective tissue exceeds the organic muscular tissue to a greater or less extent. Pure fibromata were never found. The growths which have been met with by the author were mostly small subserous structures, and usually multiple. They were very often located upon the fundus, seldom upon the posterior wall or lower segment of the body, and only in exceptional cases upon its anterior wall. The peritonæum was apt to be thickened at those points where the growths projected. The breadth and length of the cells and nuclei in a myoma are commonly greater than in a normal, unimpregnated uterus. Large arteries and veins were not often found in the small myomata, and the capillaries showed an abnormal relation; on both sides lay rows of round cells, which in many cases formed a kind of envelope. These seemed to assume by degrees a spindle shape, so that they quite resembled organic muscular fibers. In this transformation the capillary vessel disappeared, and in its place appeared a bundle of muscular fibers. Each myoma showed a long, thin pedicle, which gradually became lost in the surrounding muscular tissue, and the question was suggested as to whether this was not originally a vessel, and the very one, too, from which the myoma began its development. In some tumors, capillary vessels in a normal condition were seen, as if the process of pathological development had ended, and so had caused an end to the development of muscular tissue. Commonly a myoma and a fibro-myoma were found side by side. Though the author never saw a new development of vessels in a myoma, in a fibro-myoma this process was observed. Also the transformation of round into spindle cells was not observed in the latter variety.

THE TREATMENT OF UTERINE CANCER WITH CHIAN TURPENTINE.—Dr. E. Holland ("Brit. Med. Jour.," March 24, 1883) alludes to the introduction of this drug for the treatment of uterine cancer by Mr. Clay, of Birmingham, and the prejudice which has prevented a fair trial of it. He has used it in a series of cases in which the existence of the disease was undoubted, and in which it had made considerable headway. After a fair and unbiased trial the conclusion was inevitable that it did no good; it neither relieved pain, nor prevented hæmorrhage; when used upon the uterus it produced strangury, in some cases, and when used upon the breast it was prone to produce eczema. His opinion is that the only remedy which is as yet known for the disease is early and complete extirpation. Even in advanced cases operative measures are often justifiable for the temporary relief which can be obtained thereby.

THE PATHOLOGICAL ANATOMY OF TUBERCULOSIS OF THE UTERUS AND FALLOPIAN TUBES.—Dr. J. L. Steven ("Glasgow Med. Jour.," Jan., 1883) observed this rare condition in the case of a woman twenty-four years of age. The lungs gave very little evidence of tuberculosis. The rectum was perforated by an opening of the diameter of a quarter of a dollar, and this opening communicated with Douglas's pouch. In this vicinity caseous nodules were abundant, both in the rectal mucous membrane and in the peritonæum of Douglas's pouch. They were also found in the mucous membrane of the cervix, in that of the cavity of the uterus, and in the left Fallopian tube, which was thickened and elongated, discharged thick caseous material on section, and contained caseous, fatty masses. The right tube was involved to a lesser degree, and some of the contiguous lymphatic glands were implicated. There were also miliary nodules at the base of the brain, in the region of the infundibulum. The specimens from the uterus and tubes were examined microscopically, and the tubercular bacillus was found, thus verifying the diagnosis from the gross appearance. The conclusions from this and a case which had previously come under the author's notice are: 1. Tuberculosis of the Fallopian tubes alone may arise from the action of infective material which has been drawn into them from the peritoneal cavity; 2. Tuberculosis of the internal female generative organs may be primary, and may remain most severe in them.

OÖPHORECTOMY.—Tauffer ("Ztschr. f. Geburtsh. u. Gynäk.," ix, 1) says that since Hegar and Battey proposed this operation it has been done more than three hundred times. He dissents from Battey's statements that an artificial climacteric is to be obtained, and that this is the means of cure. He considers that an anatomical change is the end accomplished—a diseased organ being removed, which is of first importance—the climacteric not being the end to be sought for in all cases in which the operation is required; for example, in a case of hopelessly prolapsed ovary. Hegar's formula is accepted by him—that castration is indicated in anomalous and diseased conditions which are immediately dangerous to life or promise only a tedious progressive sickness, obstructive alike to enjoyment and to occupation. This presupposes that instrumentalities of a milder nature have been used, or can only be used in vain, while the removal of the ovaries will do away with the trouble. Twelve patients have been operated upon by the author without a single death. These cases are grouped upon an anatomical basis, as proposed by Hegar, the groups including the following conditions: 1. A small parovarian cyst. 2. Cystic, follicular degeneration of the ovaries, with degeneration of the stroma. 3. Such a condition of the uterus as rendered menstruation impossible or very difficult, the ovaries, meantime, proving to be normal. 4. Structural disease of the uterus; e. g., myo-fibroma. 5. Pathological displacements of the uterus and ovaries. 6. Circum-uterine and circum-ovarian inflammation, inflammation of the pelvic con-

nective tissue, and salpingitis. 7. Mental disease connected with the family history. The following is the *résumé* of the cases: ten double, two single operations; no deaths; continuance of inflammation in tubes in two cases; immediate menopause in four; menopause after an apparently normal menstruation in one; metrorrhagia continued in two patients who had been operated upon for fibroma uteri. In three the periods continued normally for a number of months (while the patients were under observation), caused by inflammation of the tubes or of some other portion of the uterus or its attachments. The author sums up his experience in the following propositions: 1. With proper precautions, castration is not attended with great danger; the average mortality is now less than ten per cent. 2. The operation should be done antiseptically, with the spray; the abdominal cavity should be closed; drainage need be employed only exceptionally. 3. The limitation of the operation to those who are not near the climacteric is not sound, for the period at which the climacteric occurs is variable. 4. The precept of Hegar's—to be able to palpate the ovaries, if they require removal—is impracticable. 5. It is usually best, for obvious reasons, to remove both ovaries, especially if one shows disease. 6. Occasionally the removal of the tubes is necessary, especially if they show the slightest disease. 7. Hystero-epilepsy is curable by castration. 8. Hysteria is often traceable to ovarian disease. 9. The question as to the influence of ligation of certain large vessels of supply in uterine fibromata, without castration, is well worthy of consideration. 10. As to prognosis concerning the climacteric, all inflammation in organs adjoining the ovaries will have a retarding influence. 11. The final result of the operation often requires months for its determination. 12. The question as to how far diseases of the female sexual organs are influential in the development of certain psychoses is an open one. 13. The same is true of the question as to whether psychoses are curable by castration. 14. In the interest of the profession, some such grouping of cases should be followed as Hegar's, thus permitting a rapid accumulation of facts necessary to one who is studying the clinical history of the subject.

Miscellany.

THERAPEUTICAL NOTES.—*The Use of Quinine in the Diseases of Children.*—M. Jules Simon, of Paris ("Revue des maladies de l'enfance," February, 1883), calls attention to the necessity of bearing in mind the curious and unexpected forms in which malarial poison manifests itself in children no less than in adults. The obscurity of the malarial origin is often greater in cases affecting children than in those affecting the mature. Not only may there be no fever, but there may be no periodical exacerbations of the disease. There may be no reason to suspect the true nature of the attacks, except the history of exposure in a malarial region. Nevertheless, if the affection be due to malarial poison, all treatment that does not take the cause of the disease into consideration will signally fail, while quinine will effect the most astonishing cures. M. Simon cites four cases of children suffering from irregular forms of malaria, some of which had resisted all other treatment, all of which, however, yielded quickly to the sulphate of quinine.

Perchloride of Iron in Diphtheria.—M. E. Dinaud ("Union médicale," July 5, 1883) calls attention to the value of perchloride of iron in diphtheria, in which disease it should be used both internally and locally. He urges its use internally for the purpose of preventing the diphtheritic poison from modifying the composition of the blood. M. Regnard, when hospital interne under M. Jules Simon, performed the following experiment: Taking two specimens of blood, one from a patient who had died of diphtheria, and the other from a patient who had

succumbed to some other disease, he caused a current of oxygen to pass through each, separately. The blood from the non-diphtheritic subject quickly regained a bright red color, while that from the case of diphtheria remained of a dark color. He was thus led to believe that diphtheritic poison deprived the blood of its property of absorbing oxygen, probably by destroying the hæmoglobin of the red corpuscles. And the efficacy of the perchloride of iron as a remedial agent in diphtheria he supposes to be due to the material it furnishes for restoring their hæmoglobin to the red corpuscles. The perchloride of iron may be given in a liquid form, two to six grammes being a suitable amount for a period of twenty-four hours. In some cases the dry salt is preferable. Dragées are now made, each representing four drops of the liquid perchloride. These may be given, one every two hours at first, and afterward one every hour. Thirty of the dragées are equivalent to six grammes of the liquid. As has been mentioned, this treatment should be combined with the local application of the iron to the diphtheritic patches.

Influence of the Benzoates of Alkalies on the Excretion of Uric Acid.—Edmund Alleyne Cook, L. R. C. P. Ed. ("British Medical Journal," July 7, 1883), has come to the conclusion, from a series of experiments, that the benzoates of the alkalies do not prevent the excretion of uric acid, as has been claimed by Dr. Garrod in a paper before the Royal Society. Dr. Cook's experiments, as interpreted by him, show that the benzoates, taken internally, do increase the solubility of uric acid, and prevent its precipitation by acidulation; but that the uric acid, instead of disappearing entirely, exists in a state of combination, perhaps as a compound acid. Other experiments by Dr. Cook confirm the view that the salts of potassium and of sodium, when present together in excess in the urine, have the power of destroying the uric acid present, probably by a process of oxidation, the products of its decomposition being oxaluric acid, and, finally, urea and oxalic acid.

Seasickness; its Prevention and Relief.—J. M. Kendall, L. R. C. P. Ed., of Sydney, Australia ("British Medical Journal," July 7, 1883), after observations in two hundred cases of seasickness, has come to the following conclusions: Food in sufficient quantity to keep the stomach comfortably full diminishes nausea, and prevents overstraining in retching. Soups, milk-puddings, and sweets should, however, be avoided, as they increase the tendency to sickness, and are followed by sickening eructations. Sandwiches of cold beef, fat bacon, if the individual can be induced to take it, and especially curry, tend to prevent seasickness. Curry is often retained by a stomach that will reject all other food. Oranges should be abstained from, and lemon-juice also, except in cases of extreme nausea. Brandy is to be used sparingly. It is useful in extreme prostration, but champagne is better. Champagne is a very popular remedy, but great prostration often follows its discontinuance. Bicarbonate of sodium acts nicely in mild cases; in severe attacks it is worse than useless. Worcestershire sauce, in teaspoonful doses, will often relieve distressing symptoms. Hydrocyanic acid is seldom of service. If acidulated water is desired, it should be acidulated with hydrochloric acid; other acid mixtures should be avoided. Creasote is to be withheld in the early stages, but is often very useful in the later stages, to relieve excessive prostration. In Dr. Kendall's hands, bromide of sodium, ten grains three times a day, proved to be the most effectual of all remedies.

Electricity as a Galactagogue.—M. E. Labbée ("Union médicale," July 5, 1883) calls attention to the value of electricity as an adjuvant to other means for establishing or restoring the secretion of milk in puerperal women. When the secretion is absent or scanty, or when it has been suppressed from any cause, in addition to other modes of treatment (suction of the nipple, poultices of leaves of the *Ricinus communis*, etc.), it is well worth while to employ a weak current of electricity. The mammary gland is to be gently compressed between two electrodes consisting of moistened sponges. A mild current passed twice a day, for from ten to fifteen minutes at a time, will materially increase the functional activity of the gland. [The author does not state whether he means the galvanic or the faradaic current.]

Galium Aparine for the Relief of Cancer.—Dr. Charles Boyce, of Maidstone, Eng. ("British Medical Journal," July 7, 1883), believes that *Galium aparine* may be used with benefit in cancer. It should be given internally and applied locally. The juice of the fresh plant,

expressed after macerating, should be given twice daily by the mouth, in five-ounce doses. The ulcers should be smeared at the same time with an ointment of the juice. Over the ointment freshly bruised leaves should be frequently applied. The diet must be simple, and the state of the bowels carefully attended to. This treatment, *if persisted in*, will gradually decrease the size of the cancer and lessen the pain.

Cannabis Indica in Melancholia and Mental Depression with Sleeplessness.—Dr. William Strange, of Worcester, Eng. ("British Medical Journal," July 7, 1883), has observed beneficial results from the use of cannabis in cases of melancholia and mental depression attended with sleeplessness. The usual dose he thinks is too small; at least a grain of the extract or twenty to thirty minims of the tincture should be prescribed ordinarily. This amount, combined with half a drachm or a drachm of bromide of potassium, rarely fails to give relief. It dulls the anxiety, lessens the depression, and gives restfulness if not sleep. If there be visceral disturbance, hyoscyamus acts well with the cannabis. Dr. Strange reports an interesting case of accidental poisoning with cannabis. Nearly half a drachm of the spirituous extract was taken at one time. Three hours afterward the patient presented the following symptoms: There was superficial anæsthesia so complete that he felt as if he were dead. He declared he could not touch or recognize anything. All objects appeared in multiple. The action of all the senses was perverted. The pupils were dilated, but responded slightly to light. There was no clammy perspiration, no failure of the pulse, no sexual excitement. Vomiting did not occur until artificially induced. The dread of death was intense, and the facial expression indicated great fear. Brandy was used freely, and after two hours the patient fell into a deep sleep, from which he awoke the next morning with a ravenous appetite.

Very Dilute Solutions of Eserine in the Treatment of Weakness of the Ciliary Muscle.—Dr. John C. Uthoff, Surgeon to the Sussex Eye Hospital ("British Medical Journal," July 1, 1883), has met with much success in the use of very weak solutions of eserine in cases of failure of accommodation. Two classes of patients, comprising no small proportion of all who resort to ophthalmic surgeons, are specially benefited by instillations of eserine in very dilute solutions. The first and chief class is that of young adults who are slightly hypermetropic, but who enjoy good vision until it is rendered defective by failure of general health, or by overtaxing the eyes with excessive near work. As the power of accommodation fails, the effort to do near work, especially by artificial light, causes headache, and such work can be performed for short periods only. The use of a weak solution of eserine (gr. $\frac{1}{10}$ to $\frac{1}{2}$ j), dropped into the eye three times a day, is attended with great benefit, and may preserve the power of near vision at its normal standard until, with rest and improvement of the general health, the ciliary muscle regains its normal power. The second class of cases consists of patients suffering from masked myopia, who, even when supplied with proper glasses, are sometimes unable to use them with any comfort for near vision. The feeble power of accommodation of such myopic eyes may be greatly improved by weak solutions of eserine. In these two classes of cases instillations of a solution of gr. $\frac{1}{10}$ to $\frac{1}{2}$ j, used three times a day, were attended in some cases with immediate benefit, the improvement continuing so long as the solution was used, and remaining for a varying period thereafter. In other cases the improvement was maintained only by increasing the strength of the solution. In a few cases—and in but few—no good results were produced by weak solutions. [Dr. Uthoff gives in detail the results of his interesting experiments with weak solutions of eserine on the pupil and ciliary muscle of the normal eye.]

THE ILLINOIS STATE BOARD OF HEALTH'S REQUIREMENTS OF MEDICAL COLLEGES.—At the last meeting of the board it was

Resolved, That the Indiana Eclectic Medical College, of Indianapolis, Ind., and the Joplin Medical College, of Joplin, Mo., having given assurances of their intention and determination to fully carry out and abide by all the requirements considered by the Illinois State Board of Health as essential to the good standing of a medical college, the diplomas of said colleges will be recognized in the future by this board whenever and so long as it shall appear that their methods and prac-

tices entitle them to be classed among "medical institutions in good standing."

In a foot-note, the secretary adds:

Although the language of this resolution explicitly says that these colleges will only be recognized as in good standing "whenever and so long as" their methods and practices entitle them to such recognition, the action of the board has been misinterpreted to be a direct and unconditional recognition of the Joplin and Indiana Eclectic. The resolution is not legitimately susceptible of any such construction, nor was it so intended by the board.

I have also answered letters inquiring whether the diplomas of certain colleges would be recognized in the future, in accordance with the spirit of this resolution, to wit, that recognition would depend upon a substantial and *bona fide* compliance with the board's requirements, both as to preliminary education and course of study.

Since the adoption of that resolution facts have come to my knowledge which do not encourage the belief that it will be possible to recognize the diplomas of the Joplin, at least, upon any assurances yet received. The announcements of this college contain, it is true, all that is asked for in the matter of requirements for graduation, etc.; but the accompanying letters and documents, herewith submitted, demonstrate that a compliance with our standard of minimum requirements in this case will, to a great extent, be merely on paper. In the case of other colleges, additional instances of evasions of their own published requirements have also come to my notice since our last meeting, and it devolves upon the board to duly consider what weight shall attach to the paper promises and proclamations of remote schools.

To recognize or reject the diplomas of colleges upon the mere fact of their literal acceptance or non-acceptance of our published standard could not fail to work injustice in some instances. On the one hand, diplomas would be recognized which might be worthless as evidence of the real qualifications of their possessors, while, on the other hand, graduates of colleges whose general standing and character are vastly better might be rejected.

To rigidly adhere to such a rule would, in effect, be to discriminate against the schools of our own State; and yet our Illinois colleges, as a whole, do better work, furnish better facilities, and are more thorough in their instruction, than those of many other States. In point of fact, many of these latter should be entitled to recognition only as preparatory medical schools; since neither in the qualifications or number of their teachers, in their hospital and clinical advantages, nor in their anatomical, physiological, or chemical laboratories do they possess such an equipment or furnish such facilities for instruction as to warrant them in conferring the degree of M. D. upon their students, with the popular estimation of the virtues which such a title now possesses.

Further, such a course would virtually frustrate the object of the Medical Practice Act, by throwing open the State to any incompetent possessor of the diploma of an institution which had nominally complied with the minimum requirements for graduation of the State Board of Health. The obvious intent of the law is to guard the people from ignorant and incompetent medical practitioners, and it indicates the standard by which to judge of the fitness of claimants to the rights and privileges conferred by it.

In any effort to define this standard, by formulating the conditions which constitute the "good standing" of a medical college, it must be the substantial and *bona fide*, and not a superficial and perfunctory compliance with the essentials of a sound medical instruction which shall be the test. Such, of course, is the meaning and intent of the board in its adoption of the report of its Committee on Medical Education.

THE NATURE AND TREATMENT OF DIPHTHERIA.—The "Therapeutic Gazette" thus summarizes the results of its "collective investigation" of diphtheria:

1. Diphtheria may be either local or constitutional in its origin.
2. It may continue as a purely local or as a purely constitutional disease, or the local disease may be followed by constitutional infection, or *vice versa*—the disease in the vast majority of instances manifesting itself in both the constitutional disturbance and the local affection.

3. The comparative value of local and constitutional remedies is dependent upon the nature of the affection in individual cases.

4. Diphtheria is a contagious disease, but not liable to attack a healthy mucous membrane or to find an entrance through it into the circulation.

5. The contagium of diphtheria is not a micrococcus, nor is it visible under the most powerful microscope yet manufactured.

6. The contagium of diphtheria is of a gaseous nature (the result of decomposing faecal and other organic matter), and can be neutralized only by a true disinfectant and not by an antiseptic.

7. The best local application is the tincture of the chloride of iron. It may be supplemented by other applications according to the indications in individual cases.

8. In a typical case of sthenic diphtheria, administer large (teaspoon) and frequently repeated (hourly) doses of calomel until the characteristic stools are secured. Following this, give large doses of the tincture of the chloride of iron every two hours, and administer alcohol within the limits of intoxication. In asthenic cases the calomel should be omitted and the main reliance placed on the iron and alcohol.

CHARING-CROSS HOSPITAL.—For the purpose of undergoing cleaning and repairs, this hospital will be closed to in-patients from the present time to September 2d, and to out-patients until August 26th. —*Lancet*.

LISTERINE.—Joseph Taber Johnson, M. D., says: "I have used Listerine in the same class of cases in which I have been accustomed to use carbolic acid, and have been much pleased with results. In uterine cases, and for removing odors from my hands after examinations, I employ it frequently. Its freedom from the peculiar odor of the carbolic acid is much in its favor. It is an excellent remedy, properly diluted, to correct the foul smells after abortion, and to disinfect offensive lochial discharges. I often use it in obstetrical cases. In syphilitic and catarrhal ulcers, and discharges in the throat and nasal passages, it promptly corrects the intolerable odor, and gives equal satisfaction in offensive leucorrhœa." Dr. George J. Engleman speaks highly of it in obstetrical and surgical practice.—*Med. Annals*.

A NEW METHOD OF APPLYING PRESSURE TO ENLARGED TESTICLES.—Dr. J. L. Corbett, of Lucknow, writes in the "*Lancet*": In the treatment of some of the diseases of the testicle accompanied with enlargement, the practice of applying pressure to the gland is undoubtedly a sound one, and is frequently resorted to by surgeons. I have often wondered that some simpler plan than that of strapping with plaster has not been suggested. The objections against the plaster strapping are numerous. First, it is a tedious business to do neatly and properly. Second, it is dirty both for operator and patient. Third, the operation has to be begun by encircling the neck of the gland with a long strip of plaster. This undoubtedly interferes with the free circulation in the vessels of the cord, and tends to prevent the absorption of the material deposited in the gland. It stands to reason that the freer the circulation in the vessels going to or from the testicle, the more rapid will the reduction in size be from the operation of absorption induced by pressure. Fourth, the strapping loosens very rapidly, and, to be of use, must be reapplied frequently. Fifth, in many cases, even when carefully applied, the plaster cuts the skin and leads to sores. Sixth, I have seen nasty, troublesome eruptions on the skin of the scrotum following the use of the plaster. I have, I think, enumerated enough objections to the old plan, and I will now try to explain the means I would recommend for obviating these objections, at the same time applying a steady, equable compressing force, and one which would also admit of easy regulation as regards the amount of compression. I may preface the explanation of my plan by saying that I derived the idea from a homely source—nothing more nor less than seeing the means employed for incasing a football; barring that, instead of having the incasing material made of leather, I would have it made of India-rubber—such as one sees in the construction of the balls in spray-producers, etc. The cases I recommend should be made of different sizes and thicknesses, oval in shape (same shape as the Rugby football when inflated). The means of tightening

the cases and applying the pressure would be identically the same as in the football cover—i. e., by lacing. There should be an opening at the neck of the case to allow the passage of the cord. This opening would be surrounded by a ring (interrupted) of leaden wire, to insure its patency and to prevent pressure on the structures of the cord. The leaden wire ring being interrupted, its softness would offer no obstacle to its easy adjustment round the neck of the enlarged gland. With a supply of the cases which I have attempted to describe above, the treatment of an enlarged testicle would offer but little difficulty; it would simply mean the selection of a rubber case of the right size and thickness, and capable, when laced up, of exercising a steady, equable pressure on the enlarged organs, and applying the case to the testicle and lacing it up. If considered necessary, the testicle could first be enveloped in a thin layer of cotton-wool; this would prevent any possibility of the skin being nipped or chafed by the lacing. As the gland reduces in size, a smaller case would be applied, and thus a steady pressure kept up until a cure was effected. The above plan has the advantages of simplicity, neatness, and quickness in its application to recommend it. It involves no elaborate apparatus, and I think does away with many, if not all, of the objections connected with the operation of strapping with plaster.

A SANITARY convention will be held at Muskegon, Mich., under the auspices of the State Board of Health, on Thursday and Friday, August 23 and 24, 1883. The objects of the convention are the presentation of facts, the comparison of views, and the discussion of methods relating to the prevention of sickness. At each session of the convention there will be addresses or papers on subjects of general interest pertaining to public health, each paper to be followed by a discussion of the subject treated. Reduced fare on railroads may be obtained by applying to the secretary of the convention, C. P. Donelson, M. D., Muskegon, Mich., for certificates.—*Weekly Medical Review*.

THE LEHIGH VALLEY MEDICAL ASSOCIATION will hold its third annual meeting at Easton, Pa., on Wednesday, the 15th inst. Dr. Traill Green, the president, will give an address of welcome; Dr. A. M. Cooper, of Point Pleasant, will relate seven cases of strangulated hernia; and Dr. Charles K. Mills, of Philadelphia, will deliver the annual address, on The Diagnosis and Treatment of some Forms of Grave Hysteria."

NAVAL INTELLIGENCE.—*Official List of Changes in the Medical Corps of the Navy during week ending July 28, 1883.*—Passed Assistant Surgeon J. D. Gatewood, detached from the New Hampshire, and ordered to hold himself in readiness for sea-service. — Assistant Surgeon Philip Leach, detached from the receiving ship Franklin, and ordered to the New Hampshire. — Assistant Surgeon Horace B. Scott, ordered to the receiving ship Franklin, Norfolk, Va. — Surgeon D. McMurtrie, detached from the receiving ship Franklin, and granted sick leave. — Passed Assistant Surgeon Robert Whiting, granted one month's leave.

ARMY INTELLIGENCE.—*Official List of Changes of Officers serving in the Medical Department of the United States Army from July 21, 1883, to July 28, 1883.*—SUTHERLAND, CHARLES, Colonel and Surgeon, Medical Director Military Division of the Pacific and Department of California. The leave of absence granted by S. O. 64, Headquarters Military Division of the Pacific, June 30, 1883, is extended two months. S. O. 168, A. G. O., July 23, 1883. — BAILY, JOSEPH C., Major and Surgeon. Assigned to duty as Post Surgeon at Fort Concho, Texas. S. O. 87, Headquarters Department of Texas, July 19, 1883. — APPEL, A. H., First Lieutenant and Assistant Surgeon. Granted leave of absence for two months, with permission to apply for an extension of one month. S. O. 30, Headquarters Military Division of the Atlantic, July 20, 1883.

SOCIETY MEETINGS FOR THE COMING WEEK.—*Tuesday, August 7th*: Elmira (N. Y.) Academy of Medicine; Buffalo Medical Association; Ogdensburg (N. Y.) Medical Association. *Wednesday, August 8th*: Medical Society of the County of Cayuga, N. Y. *Friday, August 10th*: Medical Society of the Town of Saugerties, N. Y.

Lectures and Addresses.

A LECTURE ON

THE TREATMENT OF MENINGITIS.*

BY PROFESSOR DUJARDIN-BEAUMETZ,

PHYSICIAN TO THE HÔPITAL ST.-ANTOINE; MEMBER OF THE ACADEMY OF MEDICINE, PARIS.

GENTLEMEN: This lecture will be devoted to the treatment of inflammations of the meninges, with special reference to tuberculous meningitis. The latter is undoubtedly one of the most formidable diseases which you will ever be called upon to treat, and one of the most hopeless.

Inflammation of the meninges may affect different points; sometimes the membranes of the encephalon alone are inflamed, sometimes those of the spinal cord, sometimes both simultaneously, constituting cerebral, spinal, and cerebro-spinal meningitis, any one of which may be either acute or chronic.

I can not here trace for you the pathological history of these different meningites, and, as in previous lectures, I shall devote myself to treatment, beginning with the inflammations of the meninges of the cerebrum, the tuberculous form of which claims our first attention, by its frequency, its gravity, and its peculiar march, resulting as it does from the presence of tubercle granules in the encephalic envelopes.

From the special point of view with which we are concerned we have only to insist on these two points, the presence of tubercles, and the disorders which they occasion in the meninges and in the substance of the cerebrum, and ask ourselves if these lesions are curable and compatible with life. The curability of tuberculous meningitis is a question which has been much discussed of late years; it has been denied by some and asserted by others. The problem is a difficult one; it is so easy to confound the tuberculous phlegmasia in its acute manifestations with simple cerebral or fibro-purulent meningitis, which only differs from the other in the absence of the specific granulations. Moreover, there are certain convulsive phenomena, of reflex nature, which may simulate inflammatory meningeal troubles. These former affections being curable, it is easy to understand that, when a mistake in diagnosis has been made, and the supposed tuberculous child recovers, the medical attendant would naturally claim a demonstration of the curability of the disease under consideration.

To-day this question is definitely decided, and the facts published by Archambault, Roger, Blache, Bonamy, etc., justify the affirmation that the evolution of tubercles and the accidents of phlegmasia developed thereby may be arrested in their march. The proofs are of two kinds, the one furnished by pathological anatomy, the other by ophthalmoscopic examination.

As for the first class of proofs, we have the facts noted and reported by Roger, where a child recovers from a first

attack of tuberculous meningitis to succumb to another, months or years afterward, and the autopsy reveals traces of the old phlegmasia and those of the new. As for the second class, you all know the importance of Bouchut's ophthalmoscopic studies in tubercular meningitis. The ocular examination with this instrument really enables us to make an autopsy before death by showing us the presence of tubercle granulations in the fundus oculi, so that, in an individual affected with meningitis, and presenting visible granulations in the choroid and retina, you may positively affirm the tuberculous nature of the meningeal inflammation; and, if the patient gets well, you have evidence of the curability of the disease. It was precisely this that happened to me in the case of the hospital patient which I reported to the Société des Hôpitaux in 1878.*

This patient was a young man, twenty-three years of age, occupying No. 21 of Ward St. Lazare. He had presented all the symptoms of tuberculous meningitis; his father, a drunkard, had died of phthisis; his mother had died of phthisis following diabetes; the examination of the fundus oculi by Dr. Meyer, one of our most competent oculists, revealed neuro-retinitis and tubercles in the choroid; my diagnosis certainly seemed to be well founded. This young man, I assure you, recovered perfectly from his brain trouble, and for four months has not had a return of the disease.

Moreover, why should tuberculosis of the meninges follow a different course from tuberculosis in other serous membranes? Do we not see tuberculous pleurisies get well? The remarkable investigations of Grancher have made clear the tendencies of tuberculosis in many instances toward recovery; in others, however, the march is characterized by progressive fatal invasion. There is, then, gentlemen, no doubt of the possibility of the arrest of this disease, even when the membranes of the brain have undergone inflammation; and this consoling idea ought to direct all your efforts in the treatment of this grave affection. Of course, the chances of cure are lessened as the disease advances. Possible at the onset, recovery is exceptional when, by reason of the presence of tubercle granules in the meninges, inflammatory disorders have arisen, entailing profound lesions in the encephalon.

You know, in fact, that the pathological anatomy of tuberculous meningitis shows us, besides the granules, hanging from branches of the Sylvian artery like clusters of grapes, all degrees of phlegmasia from simple thickening of the membranes to the production of pus. We also see *ramollissement* of the peripheral cortical strata, and finally that intraventricular exudation and that softening of the fornix which have long characterized this disease, to which the name of acute hydrocephalus was early applied.

These different lesions have different symptoms, and you know that, from the standpoint of semeiology, tuberculous meningitis has been divided into several periods, corresponding to the various anatomo-pathological phases of the malady. In the first periods we observe only the symp-

* Translated, with Professor Dujardin-Beaumetz's permission, by E. P. Hurd, M. D., Newburyport, Mass.

* Dujardin-Beaumetz, "Tubercular Meningitis; Arrest of the Disease; Recovery from all the Symptoms," "Union méd.," 1878.

toms belonging to the evolution of tubercle granulations. In the later stages we see unfolded the complex phenomena which result from the inflammatory alterations determined in the brain and its membranes by the presence of the tubercles.

All our therapeutic efforts, as must now be apparent to you, ought to be directed toward preventing the production of these inflammatory manifestations, and, whatever may be our chances of success in the initial periods of the disease, those chances will be well nigh nil in the terminal periods. It is sufficient to add that prophylactic treatment ought to occupy the first place.

• There is a fatal law which presides over the evolution of tubercles in different parts of the economy. I refer to the law of heredity, and tuberculous meningitis is no exception to this law. Therefore, we sometimes see all the children which spring from the union of tuberculous parents succumb successively to these first manifestations of tuberculosis, while the parents offer much longer resistance to the diathesis which they have transmitted to their offspring. Moreover, as there is a hereditary phthisis, an innate phthisis, and an acquired phthisis, so also it may be affirmed that there is a meningeal tuberculosis corresponding to these three kinds of causes. If, as West has shown, in twenty-seven out of every forty-two cases of tuberculous meningitis this diathesis is found in the parentage, in other cases it is easy to trace the influence of two other important factors—bad health of the parents on the one hand, and faulty hygienic training of the children on the other.

The bad sanitary condition of the parents explains to us how alcoholism, diabetes, scrofula, excesses, cerebral troubles, disproportion in the ages of father and mother, etc., may be invoked as causes of tuberculous meningitis in the offspring. But we must also make great account of the bad hygienic conditions of the children. In our infant wards we find every day a striking confirmation of what I have just said. When in a little child we have diagnosed miliary granulations of the meninges, we always observe, as determining causes, either tuberculosis or alcoholic excesses in father or mother, or, in the case of the child, an infancy passed amid the most deplorable hygienic surroundings. Hence indications are plain enough from the point of view of prophylactic treatment.

In all families where you have occasion to apprehend the appearance of meningeal granulations, either because one of the children has already fallen a victim to the disease, or because the parental antecedents lead you to fear an outbreak of the kind, you ought to insist upon the utmost care in the rearing and education of the child. The tuberculous mother must not nurse her own infant; the child should, if possible, be brought up in the country and kept much in the open air; prolonged and fatiguing intellectual tasks must be strictly forbidden. By gymnastic exercises you should endeavor to establish a just equilibrium between the muscular functions and those of the cerebro-spinal axis. By hydrotherapy you may calm the cerebral excitement of these young children, who almost always display a precocious intelligence. You should have a careful supervision of the food, and be ready to oppose the least

disorder of the digestive organs, for here, as in the evolution of pulmonary tuberculosis, it is the failure of nutrition in general which predisposes to cerebral granulations.

You should, then, have a surveillance of all the periods of early life, with these two ends in view: to favor in every way the nutritive functions, and to avert excitation of the cerebro-spinal axis. I have said *early life*, for if the tuberculous brain affection oftener attacks children in the first years of their life (from three to six), it also finds its victims among youths between the ages of fifteen and twenty years.

But, unfortunately, you are not often called till the advanced periods of the disease, when the meningeal inflammation has commenced its ravages. The prodromal periods have passed unnoticed, and the guardians of the child have placed to the account of peevish disposition, or to irritation of the digestive organs, the changed character of the child, the constipation, the vomiting, etc. When you are called in, meningitis is pronounced. What are you going to do? The treatment is the same whether the meningitis be tuberculous or simple.

The revulsive medication has been employed in all its rigor, and just as pleuritic, peritoneal, pericardial, articular inflammations have been treated by vesicatives, so also blisters have been applied to the shaved head of the hydrocephalic child. This revulsive treatment has been varied, and irritant inunctions have been advised with tartar emetic, or with croton oil; the actual cautery has been recommended, and even the moxa.* These revulsive measures have been applied in all their rigor, not only to the shaved head, but also to different parts of the body, and in particular to the inner aspect of the thigh. Without absolutely denying the good effects of the revulsive medication in meningitis, it must be admitted that this method of treatment has been abused, and, for my part, I have more than once seen the condition of the patient rather aggravated than benefited by the irritation and pain provoked by severe vesication in this disease.

Therefore I warn you to be chary in the employment of these violent measures, and to prefer the constant application of ice to the head, which seems to me to have quite as much influence as the most energetic revulsion. If you resort to the ice-cap, it should be made to cover the whole head, and its application should be continuous. You may also make use of cold affusions to the head, as Schützenberger† advises, and, better still, the apparatus recommended by Dumontpellier, whereby a constant current of

* Hahn, of Aix-la-Chapelle, advocates tartar emetic ointment in meningitis. No internal medication, the shaved scalp to be rubbed every hour with the stibian ointment. Henriette, Turner, Watson, and Bang counsel inunctions of pure croton oil, first recommended by Henriette (of Brussels). Tracy, Valentin, Smith, and De Bellange prefer cauterizations with the red-hot iron, while Rilliet and Barthez and Constant claim excellent results from the moxa. Bellange, of Senlis, reports a case of a child, aged three years, affected with meningitis who was cured by means of an issue of caustic potash on the top of the head.

† Schützenberger advises to place the child's head over a bucket at the edge of the bed, and to play upon it streams of water from a watering-pot ("Des affusions froides dans l'hydrocephalie aiguë").

cold water is maintained. The head should previously be shaved. To complete what I have said as to local treatment, it has been advised to leech the patient behind the ears; some, as Torci, have gone farther, and have proposed, not only bleeding from the temporal veins, but even abstraction of blood directly from the longitudinal sinus. [Torci opened this sinus from the anterior fontanelle, and withdrew eight ounces of blood. The child, a nursing infant, singularly enough, recovered, but nearly a month afterward succumbed to a second attack.] For my part, I am opposed to these emissions of blood in meningitis, and particularly in tuberculous meningitis; they weaken the child, without any sufficient compensatory advantage.

The internal treatment of meningitis comprises a great number of medicaments; unhappily, the very fact that the number is so great indicates how inefficacious, often, they all are. These medicaments may be ranged in several groups; some are directed to the phlegmasia, some to the symptoms which it produces, others especially to the tuberculous cause of the affection. Meningitis, considered as a simple inflammation, has been combated by the ordinary antiphlogistic treatment. Mercurials, and especially calomel, have been advised in small and often-repeated doses. This practice has received the sanction of Trousseau, and at one time hardly a child was attacked with meningitis that was not mercurialized to salivation. At the present day the calomel treatment is much in vogue, but the mercurial is given in fractional doses. A grain of calomel is rubbed up with a drachm of white sugar, and divided into ten powders; of these, one powder is given every hour. Unfortunately, it is not proved that the mercurial medication of meningitis which is really tuberculous has ever done any good, and it is probable that the success which has been claimed for this treatment is attributable to faulty diagnosis—I mean to say, that it is probable that the meningitis was of syphilitic rather than of tuberculous nature. That an inflammation of the meninges due to syphilitic neoplasms might be benefited by a course of mercurials, there can be little doubt. The good results which have been ascribed to quinine in meningitis are probably explicable on the supposition of errors in diagnosis. There are, in fact, two affections whose symptoms are almost identical with those of meningitis: such are, attacks of pernicious fever of the cerebral form, and typhoid fever in infants. In the first class of cases quinine has a marvelously happy effect. I have even known children, given up to die from tuberculous meningitis, to get well under quinine, for their brain disease was simply the cerebral congestion of malignant remittent fever. These facts ought to be well impressed on your minds, and, whenever you have reason to suspect the toxæmic influence of malaria, you should hasten to give quinine, and, as the stomach is often irritable, you may have to administer the quinine in suppositories, or in the form of hypodermic injections of the bromhydrate.

The same remarks are applicable to typhoid fever, and recently Barthez has called attention to this point, and recommended that whenever, in the case of a young child, you are in doubt as to whether you ought to call the disease

meningitis or typhoid fever, you should give large doses of quinine, say a scruple in four doses (which may advantageously be administered in coffee). If marked amelioration follows this medication, you may, with good reason, suspect the disease to be typhoid fever, and not meningitis.

There is a second group of medicaments addressed to the nervous symptoms developed by the meningeal inflammation. To calm the delirium, the agitation, and the convulsions which occur at different periods of the disease, opiates have been given; but chloral and bromide are especially to be recommended. Chloral, in combination with bromide, is here as useful as we found it to be in whooping cough; if it does not cure, it alleviates. In cases where cures are reported from this treatment, it is more than probable that the disease was not meningitis, but the eclampsia of childhood, dependent on peripheral or toxæmic and not on central lesions.

Two medicaments have been prescribed, from empirical considerations, in this affection—the extract of walnut-leaves and iodide of potassium.

Luton, of Reims, was the first to vaunt the curative efficacy of the extract of the leaves of walnut (known as extract of Grandval); this medicament was directed to the tuberculous cachexia, and not to the inflammation. Luton seems to have had some little success, but no one at the present day has any confidence in this treatment.

It is not so with iodide of potassium. Experimented with first by Blache, then by Bourrouse, and lauded by Bonamy, iodide of potassium counts many earnest advocates. In fact, I think that, considering the testimonials in its favor, and the perfect safety of this medicine, it is well always to have recourse in hydrocephalus to the iodide, of which as much as two grammes (3 ss.) may be given to children daily in divided doses.* It is possible that the cases where this treatment does good are of syphilitic character, and that it is ineffective in real tuberculous meningitis. I am unprepared to decide this difficult question.

You see, gentlemen, that, notwithstanding the premises which I laid down at the beginning of my lecture relative to the curability of tuberculous meningitis, I am obliged to admit that we have no certain curative means, and, unhappily, when we see little patients get well whom we have treated for this malady, we are in doubt whether the recovery is not rather the result of an error in diagnosis than of anything which we have done.

Therefore, these two facts—the possibility of the resorption of the inflammatory and tuberculous products, or the possibility that you have mistaken for a malignant tuberculous affection one that is benign and curable—should encourage your efforts in the treatment of this formidable disease.

Moreover, even in tuberculous hydrocephalus you will often observe marked remissions which are misleading, and ought always to keep you on the watch. After passing through the most severe phases of the disease, after the de-

* The formula of Bourrouse, of Lafore, is as follows: R Iodide of potassium, five grammes; water, sixty grammes. M. A teaspoonful every three, four, or five hours, well diluted. Never exceed two grammes a day ("Moniteur des sciences méd.," June, 1861).

lirium, convulsions, and coma, one sees the child suddenly revive, intelligence come back, the convulsions cease, and the family are ready to exclaim that a miracle has been wrought. Unhappily, this treacherous remission is short; the cerebral symptoms return, and the fatal event soon comes.

Among the various affections which may be confounded with tuberculous meningitis there is none more deserving of mention, because more common—attacking as it does both adults and children—than simple acute meningitis. This disease, within certain limits, is curable; ætiologically, of course, it is distinguished from the other meningeal inflammation by the absence of tubercle granulations. For these simple meningites the treatment is the same as for the tuberculous; you should especially insist on cold applications, revulsives, and calmatives. But in this form of meningitis our success will depend on the degree of the inflammation and the extent of the lesions. In respect to this latter point, the brain is sometimes strangely tolerant. We now and then see tumors of considerable size develop in the interior of the cerebrum, or even at its periphery, with a latency such that scarcely any symptoms reveal their presence. On the other hand, we frequently observe, from the moment that the cerebral cortex is affected, even if the lesion be quite circumscribed and of little depth, the most pronounced disorders in the sphere of intellect or motility, owing to irritation of the nerve-cells of the peripheral strata. It is for this reason that these meningeal inflammations are accompanied by grave symptoms, even when the phlegmasia is not extensive.

The greater part of mental disorders which are grouped under the general name insanity are only chronic meningitis, and the mental disturbances, so numerous and so similar, which alcohol produces, result from the pachymeningitis which the presence of alcohol determines in the cerebral envelopes. I can not enter into the treatment of these chronic meningites—treatment little understood, and which belongs to the domain of the expert in mental diseases rather than that of the ordinary practitioner.

I must, before concluding, speak of the treatment of infantile convulsions. It is an interesting subject not yet well elucidated, for the convulsions of infancy are only symptoms, which may be produced by a variety of causes. They may depend on inflammation of the brain or its membranes, or on certain conditions of dyscrasia (uræmia, for instance), and belong to the group of eclampsias, or else they are simply reflex manifestations, generally of little gravity, which appear in the course of various affections, as dentition and diarrhœa.

In eclamptic convulsions, or in those which have for their point of departure reflex action, the best mode of treatment consists in the internal administration of bromide of potassium, or chloral, or in inhalations of chloroform or ether. All medicaments which anæmiate the brain seem to do good in these cases; it is from this consideration that Trousseau proposed compression of the carotids. I warn you to be chary in the use of revulsives—such as sinapisms and blisters—in these cases, for severe cutaneous gangrenes, more difficult to cure than the convulsions them-

selves, have more than once been produced by the prolonged action of even a mustard cataplasm, and this in consequence of the insensibility which results from the fit.

LECTURES ON DISEASES OF THE KIDNEYS.

DELIVERED AT THE COLLEGE OF PHYSICIANS AND SURGEONS,

By FRANCIS DELAFIELD, M. D.,

PROFESSOR OF PATHOLOGY AND PRACTICAL MEDICINE.

LECTURE II.

The Symptoms Common to Bright's Disease in General

GENTLEMEN: We were speaking yesterday of the symptoms produced in cases of chronic congestion of the kidneys. We come next to a group of kidney diseases which are ordinarily classed together under the name of Bright's disease of the kidneys. Under this heading of Bright's disease we have several different varieties of kidney lesions, but yet all of them will give you a certain group of symptoms which differ in degree rather than in kind in the different examples of Bright's disease. Different authors have divided different classes of cases in different ways, and there are also various subdivisions of the subject. First, there are those who class all cases according to their clinical courses into two large classes of acute Bright's disease and chronic Bright's disease; and they speak of each case as an example of one or the other of these, according to its course. This division would answer well enough so far as clinical purposes are concerned, but it does not correspond altogether to the actual differences we get in the kidneys themselves. Others speak of all cases as being examples of nephritis which runs through three stages, called the first, second, and third stage of the disease. Others compare the inflammations of the kidneys to inflammations of the mucous membranes in other parts of the body, and they divide all cases into the two classes of catarrhal nephritis and croupous nephritis. Others divide all cases, according to the part of the kidney that is principally inflamed, into tubular nephritis and interstitial nephritis. Others class them according to the gross appearance, and divide them into the large white kidney, the atrophied kidney, and so on. The division that we shall follow is to classify all cases according to the anatomical changes that are found in the kidney itself, rather than according to the clinical symptoms, and we shall speak, therefore, of "parenchymatous nephritis" and "diffuse nephritis." Parenchymatous nephritis we find runs both an acute and a chronic course, and so we have cases both of acute parenchymatous nephritis and of chronic parenchymatous nephritis. In like manner, according as it runs an acute or chronic course, we have either an acute diffuse nephritis or a chronic diffuse nephritis. So we make altogether four different classes of Bright's disease—namely: acute parenchymatous nephritis, acute diffuse nephritis, chronic parenchymatous nephritis, and chronic diffuse nephritis. All these four varieties of Bright's disease have a certain number of symptoms in common, so, for the sake of convenience, we will consider

these common symptoms first, before we speak of the special symptoms which belong to each subdivision.

In the first place, we have certain changes in the urine. There are very often changes in the quantity of urine passed. It is diminished in amount whenever there is produced in any way a sudden venous congestion of the kidneys. The moment such a venous congestion is established there is regularly a diminution in the amount of urine produced, but this affects the watery more than the solid portions of the urine, and, therefore, you may get it diminished in quantity, but of a normal or of a high specific gravity. If, for instance, a patient is suffering from a febrile movement of any kind, then there will be a vascular congestion of the kidneys, and the urine will be diminished in amount; and this is ordinarily a diminution in the watery rather than in the solid portions, and so the specific gravity of the urine will either be normal or higher than usual. Again, when injuries are done to the urethra, we find a very marked diminution of the urine in some cases. The simple passing of a urethral bougie is sufficient in some patients to lessen the amount of urine to only a few ounces in the twenty-four hours, or even to a complete suppression, and greater injuries than this are still more apt to produce a great diminution or a complete suppression of the urine. In these cases there is not usually any congestion of the kidneys, and the only way we are able to explain the diminution in the urine after such an injury is to suppose that there is a sudden contraction of the arteries in the kidneys, so that a sufficient amount of blood does not pass into the organs, and, therefore, the amount of urine excreted is diminished.

Then, again, we find that changes taking place in the epithelial cells of the kidneys regularly produce a diminution in the amount of urine. But this effect is more marked when these changes in the epithelial cells are produced suddenly than when they take place slowly. If, in the course of an acute disease, there are produced marked changes in the epithelium of the kidneys, there is almost always at the same time a very marked diminution in the urine; but if these changes take place more slowly and gradually, then there may be no diminution in the watery portion of the urine at all, but the solid portions will be diminished in amount. If the ureters become occluded in any way, then the amount of urine is also diminished. If this occlusion is effected very suddenly—as, for instance, by a large calculus in the pelvis of the kidney suddenly passing into the ureter and blocking it up at once, and if then the patient happens to have only one kidney, or if the other kidney is diseased—then there will be produced at once a complete suppression of urine, and the function of the kidneys, so far as the urine is concerned, is abolished. But if the occlusion of the ureter takes place more gradually, as by the passage of a small calculus into it, not large enough to obstruct it completely, or by the pressure of a new growth upon the ureter so as to constantly occlude it more and more, then there is regularly a diminution not only in the amount of water, but also of the solid constituents of the urine.

Generally speaking, whenever the urine is suppressed or very much diminished it produces cerebral symptoms

which are more or less marked. By these I mean such symptoms as headache, restlessness, sleeplessness, delirium, convulsions, unconsciousness, coma, and the like, and any of these are apt to be developed whenever the amount of urine is seriously diminished. In some cases, however, this production of cerebral symptoms does not take place. When, for example, the urine is diminished as a result of injury to the urethra from the passage of bougies, or from the performance of internal urethrotomy, or the forcible dilatation of a stricture of the urethra, we do not usually have cerebral symptoms induced. But the patient is more apt to be seized with repeated rigors and vomiting, and he may pass quickly into a very alarming condition of collapse with feeble heart action, and this may be followed by great prostration terminating in death, or the patient may gradually emerge from this condition after it has existed for some time. Thus, then, the urine is not merely diminished in quantity, but entirely suppressed by the occlusion of the ureters, or by the extirpation of a single kidney when the other is wanting, or when one good kidney is removed by mistake instead of the diseased one. In these cases the function of the kidneys is abolished and the patient passes no urine at all, yet he does not develop cerebral symptoms usually for a number of days. But toward the close of the patient's life, for these cases are always fatal after a certain length of time, there will be produced some cerebral symptoms. So that, although the mere diminution in the amount of urine is usually accompanied by the production of cerebral symptoms, yet absolute suppression is not necessarily so. It is very important to remember this distinction as to the class of cases in which cerebral symptoms may be absent, and especially those cases of which I have just spoken—namely: injuries to the urethra, occlusion of the ureters, and extirpation of the only good kidney. In these cases the cerebral symptoms are either not developed at all, or else not till the lapse of a number of days; so the mere abolition of the function of the kidneys is not by itself sufficient to produce cerebral symptoms.

In other cases we find that the urine, instead of being diminished in amount, is really increased. The most marked example of this we get in the case of diabetes, and especially in cases of saccharine diabetes, and in so-called incipient diabetes where there is no sugar present in the urine. In these patients we have a very large amount of urine passed in the course of a few hours. In some cases of disease of the kidneys, especially if there is a marked change in the stroma of the kidney and in the Malpighian bodies, and a waxy infiltration of the kidney and the Malpighian tufts, we often get a very decided increase in the amount of urine; but this is an increase as regards the watery portion of the urine only, and not of its solid constituents. These people do not get rid of as much of the solids as they should, and so the urine is of a low specific gravity. But in saccharine diabetes it has a high specific gravity, from the abundance of sugar in the urine.

When you are trying to find out the causation of the changes in the amount of urine, you have to look, in the first place, to the condition of the circulation—that is, you must find out how great the tension of the blood is in the

arteries. The greater the amount of arterial tension, so much the greater will be the amount of urine produced, and, the less the arterial tension, the less will be the amount of urine as a rule. Thus the exact condition of the renal arteries and capillaries should have an effect in regulating the amount of urine. If these suddenly become contracted from any cause, then the amount of urine should be diminished; but if, on the other hand, they become suddenly dilated, then the urine should be increased in quantity, and if these vessels are diseased, then the quantity of urine should vary with the character of the disease, and whether or not it is such as to prevent the proper amount of arterial blood from getting to the kidneys. The condition of the renal epithelium also has an influence, and especially in regulating the amount of solid constituents in the urine; and, lastly, the condition of the blood itself, and whether or not it has its natural composition, affects the quantity of urine.

The specific gravity is an indication of how large a proportion of solid constituents there is present in the urine. If the amount of water is diminished and the quantity of solid matter is constant, then the specific gravity of the urine will be increased, and, if it contains a foreign body, such as sugar, for instance, then the specific gravity will be increased also. But if the amount of water is increased while the amount of solids remains the same, then the specific gravity will be low; and if the production of solid constituents is diminished, then the specific gravity will also be low, no matter how small the amount of urine produced. So in some cases of chronic Bright's disease, the patient may pass only a few ounces of urine of a low specific gravity in the twenty-four hours.

In some cases of kidney disease we find blood in the urine. When we do find blood in the urine, it comes most frequently either from the bladder or the blood-vessels of the pelvis of the kidney, or from the kidney tissue itself. That which comes directly from the bladder we are not now concerned with. The blood from the pelvis of the kidney is usually due to a condition of chronic pyelitis, which may be produced in different ways, or to the presence of calculi in the kidney, or of new growths in the pelvis of the kidney. The blood from the tissue of the kidney itself may be found either in connection with an acute congestion of the kidneys or with a chronic congestion of the kidneys, though in this latter case you will very seldom get blood in the urine, and, when found, it is an exception to the rule. But with acute congestion you may get a very considerable amount of blood in the urine. The chronic forms of Bright's disease are not often accompanied by the presence of blood in the urine, unless the disease takes on an acute condition, but in that case it is found. While, however, it is going on in its ordinary chronic course, you will hardly ever get any blood. But when there occurs an acute exacerbation of a chronic Bright's disease, then you may have blood in the urine. The acute cases of Bright's disease do very often give blood in the urine, and sometimes, too, in considerable quantities. So in cases of Bright's disease the presence of blood in the urine is either an indication of an acute inflammation of

the kidneys, or of an acute exacerbation of a chronic inflammation.

In most cases of Bright's disease we find, at some time in the course of the disease, albumin in the urine, and the particular kind of albumin that is characteristic and of any significance in this disease is the so-called serous albumin. Albumin of any other form is of no consequence in Bright's disease, but serous albumin belongs especially to Bright's disease. But we find that serous albumin, besides being present in the urine of patients with Bright's disease, may also be present in other people at times. Thus, there are persons in whom the presence of albumin seems to be a physiological rather than a pathological condition, and this is a very common experience. So it is important to remember that there are a certain number of people with a small amount of albumin in their urine who are otherwise healthy; and there are some persons who, for a number of years in succession, have always in the urine a little albumin in such an appreciable quantity as to be readily detected by the ordinary tests, though never in very large amounts. I mean that in these cases the albumin is present at some time during nearly every day, though it is not always to be found during the whole of the twenty-four hours. Some will have no albumin in the first urine passed on rising in the morning—that is, before they have eaten their breakfast—but the next specimen, taken from the urine passed a few hours after breakfast, will contain an appreciable amount of albumin, and it is especially marked in the later hours of the morning. These patients also, quite frequently, have in the urine a small amount of sugar; but this will not be constant during the whole twenty-four hours, but it will be present during some part of the day, and will be found on some days and not on others. The patient may go on in this way for a number of years and all the time have a little albumin and a little sugar in the urine, and yet he will perceive absolutely no change in his general health, and sometimes these are particularly strong and robust people. Then, again, after a number of years, the albumin and sugar may entirely disappear never to return, and you can follow some of these persons up for years after, and they never develop any other signs of disease of the kidney. There are other persons in whom you will find that albumin is always present in the urine after taking severe exercise, and this is a very common condition. In these cases, for the next few hours after exercising, there will always be some amount of albumin in the urine, and the rest of the time there will be none. Then we find, still further, that there are some young persons, between fourteen and twenty years of age, who, sometimes for weeks or months in succession, will have a considerable amount of albumin in the urine; and while it continues present there may be some change in their general health, such as a little anæmia or a little loss of appetite, and a loss of flesh and strength; then, after a time, the albumin suddenly disappears and the patients return to their natural condition of health, and never in the future manifest any further symptoms of kidney disease.

Then we find also that, when patients have had general convulsions from any cause, they will often have after

them a certain amount of albumin in the urine. We also find that some injuries of the brain, such as may result from falls, or from severe blows on the head, or from anything causing concussion of the brain, will be followed sometimes by the appearance of albumin in the urine. Still further, we find that the operation for the transfusion of blood is sometimes followed by the presence of albumin in the urine for a short time. In all these cases, then, that I have mentioned we may have the presence of appreciable amounts of albumin in the urine without any further symptoms of disease of the kidneys.

When we come to consider the kind of cases in which we get albumin in Bright's disease, we find that it is most common and most abundant in acute parenchymatous nephritis, in chronic parenchymatous nephritis, in acute diffuse nephritis, and in those forms of chronic diffuse nephritis in which the kidney is increased in size, and the most marked pathological change is in the epithelium of the tubules; but the albumin in the urine is least constant and abundant where there is a waxy infiltration of the Malpighian bodies, and in those cases of chronic Bright's disease in which the changes are most marked in the stroma of the kidney and in which the kidneys are diminished in size.

It is very difficult to understand the exact method by which the albumin finds its way from the blood to the urine. It seems to be derived directly from the plasma of the blood. But it is difficult to find out why no albumin is found in the urine in health as a rule, and yet in some healthy individuals the albumin comes and goes at intervals, although there are no structural changes in the kidneys. It is supposed by some that the cause of the albumin in the urine in diseases of the kidneys is on account of changes that have taken place in the cells lining the capillaries of the Malpighian bodies. It is believed by some that when the capsules of the Malpighian bodies and the tuft of vessels within the Malpighian capsules are covered, as they should be, by a layer of epithelial cells, then there is no transudation of albumin from the blood into the tubules of the kidneys; but as soon as these cells become obliterated, then changes in the urine take place. Others believe that the presence or absence of albumin depends upon the degree of the pressure of the blood in the renal arteries. Some hold that increased blood pressure, and others that decreased blood pressure, causes it to appear. Others attribute it to changes in the walls of the arteries, and others to congestion of the renal veins, or to changes in the composition of the blood, while others still look to the condition of the kidney tubules to find the cause of the production of albumin.

But, as a matter of fact, we find that albumin is present most constantly, and in largest amounts, in cases where there are decided changes in the epithelium of the convoluted tubes, and especially where these changes are produced rapidly there will almost always be a large amount of albumin present in the urine; but if these changes take place slowly, then sometimes there will be a good deal of albumin and sometimes only a little.

Another change that occurs regularly in the urine be-

longing to Bright's disease is the production in it of so-called casts of the uriniferous tubules, and these casts are derived directly from the tubules of the kidney. Sometimes there will be found in the kidney tubules a pale or slightly cloudy deposit, which partly fills up the lumen of the tubules and covers the epithelium lining them. This hyaline matter may subsequently become degenerated, and at last become dense and opaque, or it may become mixed with degenerated fragments of the epithelium of the tubules, or with disintegrated cells, and nuclei of the epithelial cells. The casts which are found in the urine must be formed from necessity in the tubules of the pyramids, for those which are formed in the convoluted tubes are hardly capable of passing through the long, straight tubes, which are smaller in diameter. So the casts in the urine found during life must be from a portion of the kidney beyond these.

Casts, as a rule, are found in connection with albumin. Generally speaking, if albumin is found in the urine, there will also be casts; and, on the other hand, if there are casts, there will also be albumin. But this rule is not without exceptions, and frequently you may find albumin present and not any casts, and frequently there will be casts and no albumin. And again, just as you may find albumin in some persons who have no kidney disease, so you may sometimes find casts. These are usually small hyaline casts, and not present in a very large amount. But in persons who are accustomed to take very severe muscular exercise there may be a production in the urine not merely of hyaline casts, but also of nucleated and granular casts, showing changes in the kidney epithelium.

The casts found in the urine of Bright's disease are, first, hyaline casts. These are very transparent, and present a very delicate appearance. Then we have a modification of these hyaline casts, often called waxy casts; but we do not use the term waxy here in the sense we do when we speak of a waxy infiltration of the viscera, but only because this cast matter has the same sort of optical appearance. These casts are denser, and reflect the light more strongly than hyaline casts, and they seem to be hyaline casts that have existed for a considerable length of time, and so have become denser and firmer by age. Then we also have casts made up of a mixture of degenerated portions of epithelium with hyaline matter, giving products of different kinds in the urine, and so we get epithelial granular and nucleated casts, mingled sometimes with pus, fatty and blood corpuscles. These casts are found most frequently in acute cases of Bright's disease, and, as a rule, the more acute the inflammation, so much more numerous and prominent will be the casts, and they will also be found more frequently where the changes in the epithelium of the tubules are most decided and well marked. These, then, are the principal changes that are found in the urine in Bright's disease, and while describing them I have also alluded to several changes that may take place in the urine in cases where there is really no lesion of the kidneys at all.

Original Communications.

TWO CASES OF POISONING WITH ILLUMINATING GAS SUCCESSFULLY TREATED BY THE INHALATION OF OXYGEN.*

BY ALONZO CLARK, M. D., LL. D.,

EMERITUS PROFESSOR OF PATHOLOGY AND PRACTICAL MEDICINE IN THE COLLEGE OF PHYSICIANS AND SURGEONS.

So far as I know, these two cases of poisoning with illuminating gas are the only cases of the sort on record in which the treatment by the inhalation of oxygen has been resorted to. The histories of the cases, somewhat condensed from the written reports of the house physicians, are as follows:

CASE I.—A woman, forty years old, was brought to Bellevue Hospital, and admitted into my service, May 30, 1882. She and her daughter had gone to bed the night before, and about noon they were found in a state of unconsciousness, the room where they had been lying for fifteen hours being filled with illuminating gas, the odor of which they had noticed on going to bed. On recovering from her insensibility, the patient could remember nothing that had happened from the time of her going to bed until she regained consciousness in the hospital ward, after the lapse of twenty-four hours.

At the time of her admission, she was found to be suffering from pulmonary œdema; the radial pulse was scarcely perceptible, she was unconscious and cyanotic, her extremities were cold, there was trismus with rigidity of the flexor muscles, the urine was passed involuntarily, the pupils were slightly contracted, and a frothy mucus issued from the mouth. Her temperature was 96.5° F., and her respiration 40.

I entered the hospital shortly after she was brought in, and directed the inhalation of oxygen. Its administration was kept up for three hours. In addition, dry cups were applied over the chest, and tincture of digitalis was given endermically—in all, to the amount of thirty minims. Whisky also was given subcutaneously, and hot-water bottles were applied to the extremities. Occasionally, too, the patient was aroused by flagellation.

This treatment extended over a period of four hours, at the end of which time the woman began to show signs of returning consciousness; the pulse became more perceptible and regular, warmth returned to the extremities, and the temperature and the respiration were found to be normal. The next day the patient was able to tell her own story, and was soon afterward discharged.

CASE II.—The daughter of the first patient, a girl twelve years old, was admitted at the same time, in Dr. Loomis's service. Her breath had a very strong odor of gas; she was completely comatose, the breathing being stertorous, the eyes closed, the conjunctivæ insensitive, and the pupils contracted and insensible to light; the pulse was 156, extremely feeble, and occasionally intermitting; the respirations were 30 and shallow. There were clonic spasms involving the left side of the body, with bird-claw contraction of the fingers of both hands. The urine and feces were passed involuntarily. The face and clothing showed evidence that the patient had vomited a good deal

before reaching the hospital, but after her admission there was no vomiting.

Seeing that my patient was being treated by the inhalation of oxygen, the house physician, Dr. Pryor, resorted to the same treatment in this case, and, in addition, gave a hypodermic injection of a sixtieth of a grain of sulphate of atropine. This patient also recovered.

TWO CASES OF OPHTHALMOPLÉGIA EXTERNA,

ASSOCIATED WITH DISEASE OF THE OPTIC NERVES FROM
BRAIN TUMOR.

WITH AUTOPSY.*

BY CHARLES STEDMAN BULL, M. D.,
NEW YORK.

THE two cases of ophthalmoplegia externa associated with disease of the optic nerves, which are here reported somewhat in detail, were due to brain-tumor; and they are of interest, partly because of the opportunity they gave for studying the several symptoms in the order of their development, and partly because of the autopsy which was obtained in each case.

In central paralysis of associated ocular movements it is not always easy to distinguish between cases where the lesion is at the basal centers of motion and cases in which the lesion is situated in the cortex. In those cases of paralysis of several ocular muscles in which the power of motility of the several muscles is gradually lost, or in which both eyes have become almost fixed and immovable, the lesion is probably always basal. The symptoms here are usually more advanced in one eye than in the other, and sometimes, as in the first case here reported, the motor paralysis is associated with a progressive double optic neuritis, because of the close relation which exists between the nuclei of origin of the motor and optic nerves at the base of the brain. In the first case reported, there was no ptosis of either upper lid, and this fact may be of interest in connection with Ferrier's idea of the possible existence of a separate center for the elevation of the upper lid toward the upper part of the anterior lobe of the cerebrum. Most observers have noticed that in well-marked cases of ophthalmoplegia externa the levator of the upper lid is much less affected than the other muscles, and the paralysis of this muscle usually recovers first. Nettleship thinks that in central paralysis this might be accounted for by the movements of the upper lid being more automatic than those of the eyeball, but admits that this explanation would hardly apply in cases of disease of the nerve-trunk (see the "British Medical Journal," December 2, 1882). In both the cases here reported the iris and ciliary muscle were affected, the latter slightly, as well as the extrinsic muscles, while the levator of the upper lid was involved only in the second case. In the first case, the lids were retracted somewhat as in Basedow's disease. In these cases of central origin, when the optic nerve is affected, the lesion is usually a papillitis or neuro-retinitis, rather than a progressive atrophy. But,

* Related at a meeting of the New York Medical and Surgical Society, February 24, 1883.

* Read before the American Ophthalmological Society, July 19, 1883.

in the second case, the lesion would probably have been a simple descending atrophy, if the patient had lived long enough, rather than a neuro-retinitis.

CASE I.—J. L., aged thirty-four, was first seen by me on February 14, 1881. This patient was a civil engineer by profession, and had never suffered from any serious disease, except a severe and obstinate attack of malarial fever some years before. For about fourteen months he had suffered from occasional attacks of severe headache, which at times was limited to the vertex, and at other times was confined to the occipital region. These headaches gradually increased in frequency and duration, and for the past two months were nearly constant. For the past three months he had suffered from diplopia, which at first did not trouble him very much, but after a time it changed in character and became very confusing. When either eye was closed, he at first could see perfectly well with the other, but about three weeks before he presented himself for treatment he noticed that the vision of the left eye was quite defective. Since the headaches began they had occasionally been accompanied by nausea, but of late the nausea came on with every onset of pain in the head, and often there was actual vomiting. He also complained of vertigo, which was always brought on by any sudden movement, and occasionally appeared at other times. With the exception of the headaches and diplopia and the gastric disturbance, the patient's health was good, and his appetite remained excellent till near the last. The urine had been repeatedly examined and nothing abnormal found. When I first saw him, the most marked objective appearance was the staring appearance of the eyes. There was a moderate amount of exophthalmus in a direction forward, with almost complete immobility of the left eye and limitation of motility inward of the right eye. Both pupils were equally dilated and very sluggish. The upper lids appeared retracted and drawn upward. In the right eye, $V = \frac{3}{20}$, and he could read Sn. D = 0.8 from 8" to 10"; in the left eye, $V = \frac{2}{20}$ eccentrically, and unimproved by any glass. There was a large, irregular, central scotoma in the field of the left eye, and a slight indistinctness of central vision in the right eye, though no scotoma could be mapped out. The color-scotoma in the left eye was co-extensive with the visual scotoma, except on the nasal side of the field, where it extended somewhat farther. The media were clear in both eyes. In the left eye there was an extremely well-marked papillitis which extended some distance beyond the margin of the disc, and there was an extensive, yellowish-white exudation in the region of the macula, with numerous punctate and striated hæmorrhages. In the right eye there were the signs of a papillitis in the first stage, but no hæmorrhages and no visible exudation near the macula, or between the latter and the disc. The urine was carefully examined, but neither albumin nor casts were found. Its specific gravity was 1.023, its reaction faintly acid, and there was a small amount of sugar. An examination of the muscles of the eye showed on the left side a complete paralysis of the internal and superior recti muscles, partial paralysis of the inferior rectus, and an apparent defect in the action of the superior oblique muscle. On the right side there was complete paralysis of the internal rectus only, all the other muscles being intact. Two days later, on February 16, 1881, vision had sunk in the left eye to $\frac{1}{20}$, and in the right eye to $\frac{1}{20}$, and the neuro-retinitis had become nearly as marked as in the other eye. On February 19th and 20th he vomited all the food taken, and complained of severe frontal headache, and the heart's action was accelerated. Toward evening of the latter day the vomiting ceased, but he lost all power of recalling what had occurred during the day. At half-past nine in the evening of the 20th he rose and went

to the water-closet and had a natural evacuation from the bowels, and on his way back to bed he drank a glass of water. At half-past ten, one hour later, he suddenly became comatose, with very slow and shallow respiration and very rapid action of the heart. Death ensued in about five minutes after the attack began. At no time was there any increase of temperature, nor any interference with either general motion or sensation.

Autopsy thirty-six hours later.—The ordinary signs of cadaveric rigidity were well-marked. The vessels of the scalp were found exceptionally bloodless. On the removal of the calvarium there were no signs of any special hyperæmia or inflammation either of the endosteum or meninges. The Pacellionian bodies were well-marked. On opening the arachnoid cavity there was seen to be a large amount of cerebro-spinal fluid. Both lateral ventricles were enormously distended, particularly the one on the right side, which contained nearly four ounces of fluid. The fourth ventricle was distended and its floor softened throughout nearly the whole extent. In the right third ventricle was a cystoid mass as large as a walnut, which was attached to and developed in the anterior end of the choroid plexus. The optic chiasm was compressed, and both optic tracts were flattened to ribbon-like bands across the crura cerebri. There was a spot of softening, about as large as a silver quarter-dollar, at the anterior end of the inferior convolution of the right middle lobe. Careful dissection was made of the chiasm and optic nerves as far forward as the eyeballs, the roofs of the orbits and portions of the alæ of the sphenoid bone being removed for the purpose with the bone-forceps. No distension of the sheath was found until close to the entrance of the nerve into the sclera, where there was a slight distension. This was more marked in the left eye than in the right, where it did not extend all round the circumference of the nerve. The posterior portions of the eyes, with the optic nerves, chiasm, and tracts as far as the cerebral peduncles, were removed for microscopical examination. The thoracic organs were found tolerably healthy, with the exception of some bands of adhesions between the costal and pulmonary pleuræ on the right side—the remains of an old pleurisy. The liver was slightly enlarged and fatty, and the spleen was enlarged and showed signs of old infarctions. The kidneys were normal in size, and the cortex showed slight signs of disease. The other organs were not examined.

CASE II.—J. T., aged thirty-three, was first seen by me early in October, 1882. This patient had had a sore upon the penis thirteen years before, which was probably a chancre, as it was followed by a general cutaneous eruption, ulcers in the throat, which have left their traces in the fauces, and rheumatic pains in the limbs, and by one attack of inflammation in the right eye. For the past four years, the patient stated, there had not appeared any symptoms which he could attribute to syphilis. He had never had any malarial disease, and for more than three years had not missed a day at his work, which was that of a builder. He used tobacco to excess, but had never used any alcoholic stimulants. About four months before he applied for treatment he began to suffer from headaches, which were always frontal or through the temples, and never lasted more than a few hours, but they gradually increased in frequency, severity, and duration, until for more than a month they had been constant, and were at times so severe as to almost craze him. During this last period he began to see double, the diplopia being at first confined to the left side of the binocular field of vision, but it soon invaded the entire field. His gait became very uncertain, especially when he rose from a chair or turned suddenly, the feeling being that he would fall over to one side or the other. That this was not due to the diplopia alone was proved by bandaging one eye and then causing the patient to rise suddenly, walk rapidly, or turn round suddenly;

the staggering and sensation of falling occurred as before, though the patient thought that it was not so marked. He had a blanched, unhealthy look, which, however, was different from the waxy look of chronic renal disease. He had a double systolic cardiac murmur and an intermittent pulse. The urine, on examination, showed albumin, but no sugar and no casts. In the right eye, $V = \frac{2}{30}$; in the left eye, $V = \frac{2}{30+}$, and he could read Sn. D = 1.25 at 12", but the accommodation was slightly limited. The field of vision was slightly limited on the nasal side in the right eye, but there was no scotoma in the field of either eye, and no apparent interference with the color-sense. There was complete paralysis of both *third* and *sixth* nerves; the eyeballs stood slightly divergent and immovable; there were ptosis of both upper lids, slight exophthalmus, and moderately dilated and immovable pupils. The media were clear, and there was nothing pathological in the fundus of either eye, except a slight indistinctness and œdematous condition of the temporal margin of the optic disc and adjoining portions of the retina in the right eye. On the supposition that the cause was syphilitic, and that it might also be located in the kidneys, the iodide of potassium was administered in increasing doses, beginning with fifteen-grain doses three times a day, and he was also given cod-liver oil, quinine, and iron. On account of the condition of the kidneys, the administration of the potassium iodide was frequently interrupted, and an interval allowed to elapse before recommencing its administration. Under this treatment the patient's general condition improved, the albumin nearly disappeared from the urine, and the staggering gait became less marked. There was, however, no improvement in the diplopia and no lessening in the severity of the headaches, which had to be relieved by anodynes. On October 23d the patient had a series of epileptiform convulsions, which recurred so frequently that chloroform had to be administered. From this time the patient slowly grew worse, though there was no recurrence of the convulsions. The headaches continued with the same severity, and the staggering gait and vertigo returned so that the patient kept his bed. On the evening of November 5th he had a convulsion, from which he passed into a comatose condition, which gradually deepened until the following morning, when death occurred. Ophthalmoscopic examinations were made daily up to the day of his death, but no further changes were noticed in the fundus of either eye, though vision had steadily failed during the last three weeks of life; the last record made was on October 28th, when it was found reduced to $\frac{1}{200}$ in the right eye and $\frac{2}{300}$ in the left eye.

Autopsy thirty hours after death.—Cadaveric rigidity well marked. Nothing abnormal was noticed in the scalp or calvarium on removal. The dura mater was firmly adherent, at two or three points, to the calvaria, and the blood-vessels were somewhat engorged. Considerable fluid was found in both lateral ventricles, and a little in the fourth ventricle. There was some softening of the cerebral substance discovered on incising the right middle cerebral lobe, and about midway in the substance of this lobe, and extending forward into the posterior part of the right anterior lobe, near the median line, was a dense tumor, apparently sarcomatous in nature, about the size of a small pigeon's egg, which, as it lay in the brain substance, was somewhat nearer the base than the convexity, and was surrounded by a layer of softened brain tissue of varying thickness. The right lateral ventricle and the portion of the right middle cerebral lobe on the median side of the tumor were pushed over beyond the median line to the left side, and the topographical anatomy of this region was considerably distorted. The optic tracts were slightly flattened, and the third and sixth nerves of the right side were pressed upon and flattened by the pressure of the tumor in the lobes, and this undoubtedly af-

ected indirectly the corresponding nerves on the left side. There was no distension of the sheath of the optic nerves, and no flattening of the chiasm. Both optic tracts were the seat of moderate interstitial neuritis, but this microscopic change was but very slightly marked in the optic nerves, and could be traced but a short distance in front of the chiasm. The heart was somewhat hypertrophied, and was the seat of pronounced valvular disease. The liver was large and fatty. The spleen was apparently normal. The kidneys were somewhat contracted, and the cortex was decidedly diseased. The other organs were not examined.

THE AGONY OF DEATH BY CRUCIFIXION.

By HENRY C. COOPER, M. D.,
NEW YORK.

"MAN's inhumanity to man" has been pre-eminent in all ages. In ancient times it mattered little whether it was the law to be satisfied or personal vengeance to be gratified; the punishment which would cause the utmost physical pain seems to have been in the greatest demand. But, with the advent of Christianity, the modes of inflicting capital punishment have become modified, and infinitely more merciful. Nero and his caldron of boiling oil have passed away. The cry of "*Christianos ad leones!*" is no longer heard. The Cæsars and Domitians, with their horrid cruelties; the Venetian Council of Three, and the Bridge of Sighs; the Spanish *auto da fe*, and its ghastly processions; the fiery stakes at Smithfield and Oxford—have in their turn disappeared, the garrote, the guillotine, the knout, the axe, and the rope taking their place. By gradations the majesty of the law has been vindicated in all lands, without the terrors of ancient barbarisms, until, in this nineteenth century of grace, all civilized communities demand that a life to be sacrificed shall be sacrificed swiftly, and without needless pain. True, various nations have different opinions as to how this may best be accomplished; but the American and English governments have decided that hanging is the most merciful. As compared with the Spanish instrument of death, the garrote, it is questionable whether or no hanging is the most merciful. A bungling executioner may, in either case, cause unnecessary tortures. With these subjects, however, this paper has nothing to do. The writer desires simply to set forth the various modes of crucifixion as adopted by the ancients, and to show what terrible sufferings the wretched malefactor had to undergo before death came to his relief. Hours and days of unmitigated torture; a thirst which was unquenchable; a prolonged suffocation; a horrible gasping for breath, intensified only by a moment's respite; the bites of the vultures of the air, and the stings and burrowings of insects; the burning by the rays of the noonday sun, and the cold, clammy dews at midnight—tell us, in awful language, of that *dies ira*, from a repetition of which the present day is happily delivered. In comparison, our present capital punishments are most merciful, and the vindication of justice most humane.

ORIGIN OF THE DEATH BY CRUCIFIXION.—In the Orient, that was considered an art whereby the greatest and most

prolonged tortures could be inflicted on the culprit. It was in the East where the victim was smeared with a sweetened sirup and tied to a tree, there to be left a prey to the myriad of ants which were speedily attracted.

The term "erucifixion" was a *general one*. All modes of execution were termed erucifixions by the ancients. Thus, when the Persian Haman was hanged, the custom was borrowed from the Babylonians, and termed a crucifixion. But the earliest example of erucifixion on record is that of Pharaoh's chief baker, said, in the earliest English version of the Bible, to have been hanged (Genesis, xl, 16-22); but by Josephus to have been erucified (Whiston's "Josephus," vol. i, pp. 65, 66).

Herodotus states that Darius "erucified" three thousand Babylonians, though it is by no means probable that very many of them were actually placed upon a cross.

So, also, when the robber Sinnis bent two pine-trees to the ground, and to the interlacing portions bound his victim, the trees were then unbound, and, springing back, the victim was dismembered; this also was termed a crucifixion, as was also the punishment inflicted upon Prometheus, on Caucasus, and Andromeda.

The Greeks seldom resorted to crucifixion; the Carthaginians never. But the Romans were most artistic in carrying out this form of punishment. Pliny writes that Tarquinius Priscus invented it, and that it came into general use between 260 years and 160 years B. C. The culprit was entirely at the mercy of the executioner; the judge, having pronounced judgment, was never present when the sentence was carried into effect.

In Rome, all culprits who were slaves were erucified, as were also traitors and insurgents. The specific charge which made Pilate order Jesus Christ to be erucified was the accusation of insurrection made against him, and Pilate hoped that, by killing the Jewish Messiah in the most ignominious manner, he would thereby obliterate the most dangerous Jewish doctrine.

MODES OF CRUCIFIXION.—The most primitive seems to have been an upright tree, to which the victim was either bound or nailed.

In Ezra vi, 11, it is ordered that "whosoever shall alter this word, let timber be pulled down from his house, and, being set up, let him be hanged thereon, and let his house be made a dung-hill for this."

Titus had no time to add a horizontal beam, when erucifying five hundred Jews a day for months. He simply drove a pole into the ground, to which the victim was lashed, and he was left to die.

Slaves were generally punished by having a "furea" (fork) slipped over their necks, to which their arms were tied, and this was hoisted to the top of a pole, and secured there by a rope fitting into a groove. This device evidently suggested the more recent cross, to save time, and as being more artistic.

It was usual to nail the hands, but to bind the feet. It is erroneous to suppose that a single spike secured both feet to the cross, one foot in front of the other. A spike was driven through each foot, sometimes to a support fixed on the cross just beneath the plantar surface of the feet.

Additional cruelty was sometimes practiced by the victim being seated on a spike or "horn" (Justin Martyr), though at times a piece of wood was so placed that he might rest on it.

PHENOMENA ATTENDING CRUCIFIXION.—The nails, aided by intense heat, soon produced gangrene. Although the culprit writhed in agony for some time, it is doubtful whether any long-continued activity of the body could be maintained. The weight of the intestines, gravitating downward, produced intussusception. The circulation was impeded, the viscera pressing on the veins. The lungs could not be emptied. Insects got into the eyes, nose, ears, and wounds. At nightfall the bones of the legs of those still living were broken, ostensibly to hasten death; but, in reality, to gratify the spectators who were becoming sated.

Death generally resulted from gangrene of wounds, displacement of viscera, regurgitation of blood through the valves of the heart, pericarditis, and paralysis of heart and lungs. "In many cases death was accelerated by hunger and thirst, the vicissitudes of heat and cold, or the attacks of ravenous birds and beasts, and in others designedly accelerated by burning, stoning, suffocation, breaking the bones, or piercing the vital organs" (Adam Clarke, "Commentary on Matthew," chap. xxvii, v. 35).

According to Origen, Timotheus and Maura, a married pair who suffered about the year 286, under Diocletian, remained for nine days and nights on the cross, exhorting each other, and expired on the tenth day. By order of the Emperor Maximian, in the year 297, seven Christians at Samosata were subjected to long and varied tortures; three of them were taken down from the cross while yet alive, and the Emperor, hearing of this, ordered huge nails to be driven into their heads.

ACCESSORIES TO THE DEATH OF CHRIST BY CRUCIFIXION.—The one great object in history, toward which the eyes of civilized generations have been constantly directed, is that of the body of Jesus Christ hanging on the accursed tree. As being typical of the sufferings of many, it is here introduced as bearing upon the subject, and an analysis of His sufferings may not be considered out of place.

It is to be assumed that, the cross lying upon the ground, Christ was laid thereon, and nails driven through the hands and feet. The cross was then raised, and the lower end of the perpendicular portion sunk in a hole that had been dug for it, and made secure and upright. The nail, driven through the palmar surface of the hand, would probably perforate or impinge upon the following (it being assumed that, as "no bone was broken," the nail, on being struck, would *glide* to its ultimate destination in the cross through the parts offering the least resistance):

1. Integument.
2. Palmar fasciæ.
3. Superficial palmar arch.
4. Digital branch of median nerve.
5. Tendon of flexor profundus digitorum.
6. Adductor pollicis.
7. Deep palmar arch.
8. Second and third lumbricales muscles.

9. Interosseus palmaris muscle.
10. Interosseous ligament.
11. Bone (doubtless the nail making its exit between the second and third metacarpal bones).
12. Interosseous ligament.
13. Dorsal interossei muscles.
14. Extensor indicis.
15. Extensor minimi digiti.
16. Extensor communis digitorum.
17. Branches of posterior, ulnar, and radial arteries.
18. Digital branches of ulnar and radial nerves.
19. Dorsal fascia.
20. Integument.

In like manner, the nail, being driven through the dorsal surface of the feet, would necessarily perforate or impinge upon the following:

1. Integument.
2. Dorsal fascia.
3. Metatarsal or second and third interosseous arteries.
4. Branches of the anterior tibial nerve.
5. Extensor brevis digitorum.
6. Dorsal interosseous muscles.
7. Metatarsal ligament.
8. Bone (doubtless the nail going between the second and third metatarsal bones).
9. Interosseous ligament.
10. Interossei plantares.
11. Lumbricales muscles.
12. Branches of internal plantar nerves.
13. Second and third branches of external and internal plantar arteries.
14. Plantar fascia.
15. Integument.

THE IMMEDIATE CAUSE OF THE DEATH OF CHRIST.—Quoting Sir J. Y. Simpson, of Edinburgh, Scotland, he says:

Speaking medically, that the cause of death was laceration or rupture of the heart is a doctrine in regard to which there can be no absolute certainty; but, assuredly, in favor of it there is a very high amount of circumstantial probability.

I. His death was not the mere result of crucifixion, for

1. The period was too short; a person in the prime of life, as Christ was, not dying from this mode of mortal punishment in six hours, as He did, but usually surviving till the second or third day, or even longer.

2. The crucified died, as is well known, under a lingering process of gradual exhaustion, weakness, and faintness. On the contrary, Christ cried with a loud voice, and spoke once and again, all apparently within a few minutes of His dissolution.

II. No known injury, lesion, or disease of the brain, lungs, or other vital organs could, I believe, account for such a sudden termination of His sufferings by death except

1. Arrestment of the action of the heart by fatal faintings or syncope.

2. Rupture of the walls of the heart, or larger blood-vessels issuing from it.

III. The attendant symptoms—particularly the loud cry and subsequent exclamations—show that death was not the effect of fatal faintings, or mere fatal arrestment of the action of the heart by syncope.

IV. On the other hand, these symptoms were such as have

been seen in cases of rupture of the walls of the heart. Dr. Walshe says, when treating of the symptoms indicating death by rupture of the heart: "The hand is suddenly carried to the front of the chest, a piercing shriek uttered, etc." The rapidity of the resulting death is regulated by the size and shape of the ruptured opening. But, usually, death speedily ensues, in consequence of the blood escaping from the interior of the heart into the cavity of the large heart-sac or pericardium, which sac has, in cases of rupture of the heart, been found, on dissection, to contain sometimes two, three, four, or more pounds of blood accumulated within it, and separated into red clots, and limpid serum, or "blood and water," as is seen when collected out of the body in a cup or basin in the operation of common blood-letting.

V. To obtain positive proof that rupture of the heart was the cause of death, a post-mortem examination of the chest would be necessary. In ancient times such dissections were not practiced. But the details left regarding Christ's death are most strikingly peculiar in this respect: that they offer us the result of a very rude dissection, as it were, by the gash made in His side after death by the thrust of the Roman soldier's spear. Its size may be inferred from the Apostle Thomas being asked to thrust, not his "finger," but his "hand," into it. (*Vide John, xx, 27.*) The effect of that wounding or piercing of the side was an escape of "blood and water," visible to the Apostle John, standing some distance off; and I do not believe that anything could possibly account for this appearance, except a collection of blood effused into the distended sac of the pericardium in consequence of rupture of the heart, and afterward separated, as is usual with extravasated blood, into two parts, viz.:

1. Crassamentum, or red clot.
2. Watery serum.

The subsequent puncture from below of the distended pericardial sac would most certainly, under such circumstances, lead to the immediate ejection and escape of its sanguineous contents in the form of red blood, and a stream of watery serum, exactly corresponding to that description given in the sacred narrative, "and forthwith came there out blood and water."

VI. Death by mere crucifixion was not a form of death in which there was much, if any, shedding of blood. Punctured wounds do not generally bleed, and the nails, besides being driven through parts that were not provided with large blood-vessels, necessarily remain, plugging up the openings made by their passage. This "shedding of blood," therefore, was assuredly done in the feeblest possible sense, under the view that the immediate cause of death was rupture of the heart, and the consequent escape of His life-blood from the central cistern of the circulation.

It is evident that Jesus was dead before the lance was used, by the word *νυττειν*, used by St. John, which may either mean perforation or simply *scraping*.

George Gottlob Richter, of Göttingen, was the first to consider the pathology of a crucified body. He considered that an abnormal return of blood to the heart and an undue pressure upon the thorax were the immediate cause of death.

The Roman law required that an intoxicating drink should be given to the victim, but Jesus did not take this, but a Roman drink called "posca," of which the principal ingredient was vinegar.

Bartholinus states that a robber was crucified by his hands being nailed and his body free. And though the victim, if very fat, was bound by thongs, it is certain that

the "sedile" (foot-stool) was seldom used, and that the feet, if nailed at all, were nailed from the sides. If such a supposition is correct, it may readily be seen how the agony of crucifixion was intensified.

It has been deemed expedient, since the creation of the world, that the evil-doer should be punished. That the punishment was always commensurate with the offense need not here be discussed. Suffice it that we know that in thousands of cases the punishment for crime was brutal, ignominious, and unjust. Death by crucifixion was undoubtedly the most cruel punishment ever devised and carried into effect. Dismemberment, evisceration, the tearing to pieces by wild horses, the rack, and the screw, were terrible to contemplate, but death mercifully relieved the victim in a few hours. But in our day the garrote and the rope do their work swiftly, and generally the victim is dead within a few minutes.

But the agony of death by crucifixion—who shall describe it? The festering wounds, the dragging weight of the body on the nailed hands, the awful and unquenchable thirst, the attacks of birds of prey and the stings and bites of noxious insects, the fierce heat of the sun upon the naked body, the chilling moisture at midnight, the head racked with pain and the body writhing in convulsions, and the long desire for death, which seemingly never comes—afford considerations for the reflective mind of the vast transitions that have been made by men spanning the time between these barbarisms and the merciful codes of the nineteenth century.

And perhaps that day may dawn upon the earth when nations shall leave the punishment of death to Him who said: "Vengeance is mine, I will repay," and when neither crucifixions nor hanging shall be known any more for ever.

Book Notices.

Transactions of the Obstetrical Society of London. Vol. XXIV. for the year 1882. London: Longmans, Green & Co., 1883. Pp. lviii-339.

As in former years, the volume of the "Obstetrical Transactions" for 1882 contains, along with many valuable papers and formal discussions, a great number of brief but interesting accounts of anatomical and morbid specimens and therapeutical devices shown at the meetings. Much of its contents has appeared in the different journals, and at various times our readers have been given a summary of portions of the proceedings as they were brought out by our English contemporaries; but that will not diminish the interest of the volume for those who wish to follow the progress of obstetrics and gynecology systematically, or their desire to possess the consecutive volumes.

The following were among the more noteworthy proceedings of the society during the year: An adjourned debate on Dr. Godson's paper on the Treatment of Spasmodic Dysmenorrhœa and Sterility by Dilatation of the Cervical Canal with Graduated Metallic Bougies; a case of retention of menstrual fluid in one half of a double uterus, by Dr. Alfred L. Galabin; the Annual Address by the President, Dr. J. Matthews Duncan;

a paper by Dr. W. S. Playfair, on Emmet's operation (trachelorrhaphy, or, as Frenchified by the author, *trachélo-raphé*); a successful case of laparotomy for extra-uterine pregnancy, by Mr. J. Knowsley Thornton; a paper on the corpus luteum, by Dr. W. A. Popow, of Pensa, Russia; an essay on the natural history of dysmenorrhœa, by Dr. John Williams; an adjourned discussion on Dr. Williams's paper; a paper on the relation between backward displacements of the uterus and painful menstruation, by Dr. G. Ernest Herman; an account of a case of obliquely contracted pelvis in a child with sacro-iliac synostosis on one side, with remarks on the pelvis of Nägele, by Dr. Francis H. Champneys; an analysis of several cases of interstitial pregnancy, by Mr. Alban Doran; a description of a kyphotic pelvis, with remarks on Breisky's description, by Dr. Champneys; a paper on puerperal diabetes, by Dr. J. Matthews Duncan; and a paper on the treatment of post-partum hæmorrhage by means of hypodermic injections of ergotinine, by Dr. C. Chahbazain, of Paris.

Perhaps our readers will be most interested in Dr. Playfair's paper. Although it deals with the merits of a procedure that now finds few opponents in this country, and has practically ceased to be the subject of discussion, except as to minor matters of detail, it is always well to review our conclusions, however settled they may be, in the light of what is thought of them elsewhere. We must say, however, that in the discussion there was a good deal of random talk, together with not a little of flippant reasoning from premises so erroneous as to seem grotesque. It is certain, however, that the English are "stirred up" in regard to Emmet's operation, and it may be inferred that they will not let it alone until they have come to view it in its right light.

BOOKS AND PAMPHLETS RECEIVED.

Sanitary and Statistical Report of the Surgeon-General of the Navy, for the year 1881. Washington: Government Printing Office, 1883. Pp. 684.

On the Treatment of Wounds and Fractures: Clinical Lectures by Sampson Gamgee, F.R.S.E., Consulting Surgeon to the Queen's Hospital, Birmingham, etc. With forty-four engravings on wood. Second edition. Philadelphia: P. Blakiston, Son & Co., 1883. Pp. ix-364. [Price, \$3.50.]

A History of Tuberculosis, from the time of Sylvius to the present day. Being in part a translation, with notes and additions, from the German of Dr. Arnold Spina. Containing also an account of the researches and discoveries of Dr. Robert Koch and other recent investigators. By Eric E. Sattler, M.D. Cincinnati: Robert Clarke & Co., 1883. Pp. 191.

A Compend of Materia Medica and Therapeutics, with especial reference to the Physiological Actions of Drugs. For the use of Medical, Dental, and Pharmaceutical Students and Practitioners. Based on the Sixth Decennial Revision of the U. S. Pharmacopœia, and including many Unofficial Remedies. By Samuel O. L. Potter, M.A., M.D., Acting Assistant Surgeon, U. S. Army, etc. Philadelphia: P. Blakiston, Son & Co., 1883. Pp. 141. [Quiz Compend, No. 6. Price, \$1.]

Announcement and Catalogue of the National Medical College (Medical Department of the Columbian University), Washington, D. C., for the sixty-second session, 1883-'84.

THE CANADIAN FRONTIER, according to Dr. James E. Reeves, of the State Board of Health of West Virginia, constitutes a wide door of entry for infectious diseases, and a very dangerous one, "because it can not be guarded by United States authorities; hence the possibility that cholera may first attack the lake cities—Buffalo, Chicago, Milwaukee, and Detroit, and spare meanwhile New York, Philadelphia, Baltimore, and other cities on the Atlantic seaboard."

THE
NEW YORK MEDICAL JOURNAL,
A Weekly Review of Medicine.

Published by
D. APPLETON & Co.

Edited by
FRANK P. FOSTER, M. D.

NEW YORK, SATURDAY, AUG. 11, 1883.

GERMICIDE INHALATIONS IN THE TREATMENT OF CONSUMPTION.

THE "Australian Medical Journal" for April, 1883, contains a report by Mr. G. Lydiard upon the "Particulars and Method of using the Carbolic Spray for the Cure of Sheep affected with Lung Worm." A fumigating house, built specially for the purpose, was as air-tight as it could be made. In it there were two rooms each thirty-three feet long, seventeen feet wide, and six feet and a half high, affording capacity for three hundred lambs. The solution of carbolic acid to be sprayed was first made of a strength of 1-30, afterward 1-20. Subsequently "Calvert's carbolic No. 4," in proportion of 1-1, was used. The spray, produced by compressed-air machinery, was thrown into each room by four jets. It was so fine that it mixed at once with the air, scarcely any falling to the ground in a mist. One pint of carbolic acid was used to each room. When the spraying began, the sheep moved about a little, but soon became quiet, and stood with their eyes shut, chewing the cud. They were kept in the spray half an hour. No sheep have been lost by the process; on the other hand, they almost ceased to die from the lung-worm disease, and rapidly improved in condition. Mr. Lydiard found no difficulty himself in breathing in the room filled with spray, but felt a tickling all over his face, which he likened to the pricking of needles. He was obliged to shut his eyes. Pure carbolic acid was used in some of the worst cases.

Mr. Lydiard's report was read and discussed at a meeting of the Medical Society of Victoria (Australia), with reference to its bearing on the treatment of tubercular phthisis. The report showed that a carbolic-acid spray of sufficient strength to destroy the *Strongylus filaria*, a worm from half an inch to an inch in length, lying free in the air-tubes, could be inhaled with impunity for a time by man or beast. While these facts do not prove that the bacilli of phthisis can be destroyed in a similar way, they indicate the possibility of such a thing, and suggest the propriety of further experiments so conducted as to determine with more certainty what can and what can not be accomplished in tubercular and other forms of phthisis by such inhalations. It is still disputed whether the bacilli are a cause or a result of tubercular phthisis. By some it is contended that they are the prime cause of the formation of tubercle; by others, that they simply aid in the softening and breaking down of tubercular deposits; by still others, that they have no causative action either in the formation or softening of tubercle, but merely find in a tubercular lung conditions favorable for their own growth and propagation. Some observers hold that the germs are locked up within the non-vascular tubercle in such a manner that the spray of carbolic acid, or any similar agent,

could not penetrate to them, much less destroy them. But, while theoretical objections are not wanting, none of them should prevent proper experimentation to test more thoroughly the value of carbolic acid and other germicide spray in the treatment of tubercular phthisis. It is well to bear in mind that the process so successfully employed in the case of Mr. Lydiard's sheep is not based upon the use of inhalers, but on the placing of the diseased animals in an atmosphere permeated with a spray, regulated as to its strength and other characteristics by successive trials, to meet the needs of the special form of disease for the relief of which it was resorted to. It seems that a spray in which the particles are very finely divided can be inhaled of much greater strength than one in which the division is not so fine. Moreover, the hygroscopic condition of the air must make no little difference in the fineness with which the spray can be made and maintained. This and all other conditions affecting the nature of the spray, and therefore its adaptability to the end in view, should be carefully taken into consideration. Though germicide inhalations may never amount to a specific cure for any form of phthisis, if they can be made to assist in the relief of symptoms, in the arrest of the disease, and therefore in prolonging life, they will prove a great blessing to a large class of those who suffer from the ravages of the disease.

Some have decried all treatment by inhalations, on the ground that they must be difficult if not impossible for the physician to carry out, and irksome, if not unbearable, for the patient. Such objections, after all, are not of much moment. The real question is as to the efficacy of the treatment, and this can be decided, not by *a priori* reasoning, but by proper experimentation alone.

THE HEALTH OF THE NAVY.

It is seldom that a "blue-book" is found so replete with information of practical value to students of sanitary science and to medical statisticians as the "Sanitary and Statistical Report of the Surgeon-General of the Navy for the year 1881," just issued from the Government Printing Office. While it is nothing new for the medical corps of the navy to do good service in advancing the art of medicine, the volume in question must certainly be looked upon as one of the chief evidences of the many given by Surgeon-General Wales of his eminent fitness for the office he holds, and of his faculty of guiding the work of his corps in such manner as to make it of the greatest availability for the purposes of medicine in general, as well as for the preservation of the present satisfactory state of the health of the navy.

The report deals not only with the general sanitary condition of the force, but with that of the various squadrons, and even that of each individual vessel and shore station. Under these headings elaborate tables supplement the text. Of the entire force, 14,013 persons came under medical treatment during the year, including 469 whose treatment was continued from the preceding year: 400 of these were still under treatment at the close of the year, 97 died, 308 were invalided from the service,

1,345 were invalided to hospital, and 11,863 recovered. The total loss of time occasioned by injury and disease amounted to 166,927 days. Compared with the figures of the preceding year, the number of persons under treatment was increased by 626, and the number of those invalided to hospitals by 355; but 13 fewer were invalided from the service, the time lost was 12,508 days less, the deaths were fewer by 14, and the daily average sick-rate and the average duration of treatment were considerably reduced. This showing is highly creditable to the medical corps.

In the enumeration of diseases, the nomenclature of the Royal College of Physicians, of London, is adhered to in the main. This we can not approve of. The nomenclature is pedantic and open to various objections that we have not space to allude to at present. Not the least of them is its tendency to do away with the safeguard against error that the use of the more ordinary terms would supply. A striking illustration of this is to be found in the statement, in the report under consideration (p. 8), that nine *boys* were among the victims of *senectus*! Undoubtedly this is a typographical error, evidence of which is found in the fact that one man and nine boys appear in the table as making a total of thirteen, but it is safe to say that the use of a term more readily comprehensible by the proof-reader than *senectus* would have led him to call attention to the mistake.

THE SCIENTIFIC WORK OF THE NAVAL MEDICAL CORPS.

THE same report furnishes the most gratifying proof of the pains taken by the medical officers of the navy to do creditable scientific work, while not neglecting the daily duties of attendance on the sick. We have on various occasions mentioned this devotion of the corps to investigations calculated to aid in the advance of medicine. That the data recorded in this volume have been worked out under all the disadvantages incident to a reduction of allowances, in some instances so great as fifty per cent. from the estimates, can but add to our admiration. The Government can scarcely afford to cripple the performance of such important work by stinginess in the matter of appropriations.

Among the scientific contributions to the volume is a continuation of Passed Assistant Surgeon Streets's experimental investigation of the organisms contained in the dust of the air, with excellent heliotype prints of microphotographs of the *Bacillus subtilis*, and the *Bacillus ruber* (Cohn). This is followed by an account of the sanitary survey of a proposed site for the new Naval Observatory, by a board composed of Medical Director J. M. Browne, Surgeon J. H. Kidder, and Passed Assistant Surgeon S. H. Griffiths. This includes a consideration of the topography, the buildings, the water supply, the drainage, and the soil. Well-executed heliotypes are given of various organisms found in the sediment of the well water and obtained by atomization of the ground air. The board came to the conclusion that the selection of the site was a fortunate one.

In the sections devoted to the various squadrons, topographical and sanitary reports are given in regard to numerous locali-

ties that will always have to be taken into consideration in our naval hygiene. Of the North Atlantic Squadron, Surgeon G. F. Winslow, of the *Vandalia*, reports upon Barbadoes, Trinidad, Antigua, Puerto Cabello (Venezuela), St. Pierre, Fortune Bay, St. John's (Newfoundland), St. John (New Brunswick), Hamilton (Bermuda), and Basse Terre (St. Kitts); Passed Assistant Surgeon H. C. Eckstein, of the *Alliance*, upon Reykjavik, Hammerfest, Spitzbergen, and West Spitzbergen; and Passed Assistant Surgeon H. Aulick, of the *Despatch*, upon Samana and San Juan (Puerto Rico).

Of the South Atlantic Squadron, Passed Assistant Surgeon F. B. Stephenson, of the *Shenandoah*, reports upon Port Castries, Curaçoa, and Carthagen. Of the Pacific Squadron, Surgeon C. H. White, of the *Lackawanna*, reports upon Juan Fernandez, the Marquesas Islands, the Society Islands, and the Samoan Islands.

Of the European Squadron, Medical Inspector B. F. Gibbs, of the *Lancaster*, reports upon Gibraltar; Medical Inspector J. C. Spear, of the *Trenton*, upon Marseilles and Funchal; Surgeon G. S. Beardsley, of the *Galena*, upon an earthquake at Chios; and Surgeon J. W. Coles, of the *Nipsie*, upon Stockholm and Christiania.

Of the Asiatic Squadron, Passed Assistant Surgeon B. F. Rogers, of the *Richmond*, reports upon Papiete and Upolu; Passed Assistant Surgeon G. E. H. Harmon, of the *Alert*, upon various Japanese and Chinese towns; and Passed Assistant Surgeon F. H. Terrill, of the *Monocacy*, upon his observations in Japan and Corea.

Finally, an elaborate and exceedingly valuable Report on the Pharmacopœias of all Nations, by Surgeon J. M. Flint, calls for more comment than we are able to give it in the limited space now at our command. We have, indeed, been able to do little more than mention the many important scientific contributions contained in the volume. We trust that the edition is large enough to admit of its being distributed freely among public libraries where it will be accessible to the profession.

THE AMERICAN MEDICAL COLLEGE, OF ST. LOUIS.

WE have received a communication from the dean of the college, Dr. George C. Pitzer, in which, referring to an account of the annual meeting of the State Board of Health of West Virginia that appeared in our issue of July 21st, he says:

"The American Medical College is a reputable institution. No college in the West stands better with home authorities than this. Its hospital and clinical privileges, as conferred by the Board of Health of St. Louis, are the same as other colleges, and have never been questioned. We ask you to give place to this answer, and herewith furnish the curriculum of the American Medical College, that your readers may know the requirements of this institution.

"*Fees and Requirements for Admission.*—A good elementary English education, including Mathematics, English Composition and Elementary Physics, or Natural Philosophy, as attested by the presentation of a diploma, from some literary and scientific college or high school, or by creditable examination upon those branches by a committee appointed for that purpose. Ticket for One Session, including all departments, \$75.00. (Matriculation and Demonstrator's ticket included in the above.) Preliminary Course, Free. Hospital Tickets, Free. Graduation Fee, \$25.00. Scholarship Ticket, including Graduation

Fee, \$150.00. The above includes all College expenses, except a small fee for dissecting material, which is collected at the time the student enters his dissecting class.

"*The Conditions for Graduation.*—A candidate for graduation must be a man of good moral character, twenty-one years of age or over; he must have taken two courses of Lectures, with three years' reading, including the time at Lectures, one course of which must have been taken in this College; the other may have been taken in any other school in good standing. He must show a record of faithful attendance both at the College and Hospital Lectures. The Graduating Class is made up one month before the close of the Session by filling out a blank furnished by the Dean, which when filled is returned to the Dean, with the Graduation Fee. If the candidate is rejected the fee will be returned. At the close of the Session the *final* examination will be held. Each Professor examines in his own department, and the standing of each student is based upon a per cent. No Diplomas are issued from this College except upon actual attendance and examination. No degrees of *honorary* nor *ad eundem* are conferred by this corporation. Graduates of other Medical Colleges in good standing, desiring the degrees of this College, must attend a course of Lectures, pass the examination, and pay the same Tuition and Graduation Fee as other candidates."

"Now, if this is not as regular as any college in the country, then we can not understand plain English. Our board of trustees is composed of the following-named men: Jacob S. Merrill, President, and now Treasurer of the City of St. Louis; Hon. N. C. Hudson, Vice-President, and now Collector of the City of St. Louis; P. D. Yost, Secretary, and now a member of the State Board of Health of Missouri; E. Yaunkin, Treasurer; ex-Governor Charles P. Johnson, A. Sumner, W. V. Rutledge, A. Merrill, W. W. Houser, and George C. Pitzer.

"This board is responsible for what it says and does, and is exceedingly jealous of the reputation and good name it has earned in the past ten years of its existence."

It is quite possible that the State Board of Health of West Virginia acted upon insufficient information when it decided not to recognize the diplomas of the American Medical College. In the Illinois State Board of Health's "Directory of the Institutions granting Medical Diplomas or Licenses in the United States and Canada," published November 1, 1882, it is stated that the diplomas of the college are "recognized conditionally," and the remark is made that "graduates from this school must present a written statement, from the dean, that they have studied medicine three years, and have taken two full courses of twenty weeks each, embracing a period of sixteen months, before they are granted certificates by the Illinois State Board of Health." Moreover, the secretary of the Illinois board, in a private letter dated July 31, 1883, informs us that the American Medical College is one of the thirty-five colleges that had at that date given evidence of their intention to comply with the board's requirements.

MINOR PARAGRAPHS.

CHOLERA.

A LIKE favorable account may be given of the cholera. It has not yet spread beyond Egypt, and even in that country its prevalence is much diminished and the percentage of deaths among those attacked has fallen notably. But these facts afford but a slender basis for the newspaper talk to the effect that the Egyptian outbreak was really not one of cholera, but of "choleraic fever." Dr. Reeves, of the State Board of Health of West Virginia, having called attention to the danger of the disease creeping into the United States from Canada, in case it

should spread over Europe, it is satisfactory to learn that the sanitary officials of several of the frontier States are impressed with the need of taking all possible precautions. A number of cargoes of Egyptian rags are still on their way to this country, but there is reason to believe that they will be dealt with properly at all our ports. Particularly energetic measures in this regard have been resolved upon in Boston, which is, perhaps, of all our ports the one most exposed to this special source of infection.

YELLOW FEVER.

Thus far, the precautions taken by the Surgeon-General of the Marine-Hospital Service, by the sanitary authorities of our ports, and by the Sanitary Council of the Mississippi Valley, have prevented the disease from effecting a lodgment on American territory. The work of these various officials has now been reduced to such a system that there seems to be very little ground for anxiety. This, however, should not lead to any relaxation in its execution.

TYPHUS.

As typhus is quite prevalent in Liverpool, a port with which New York is in constant communication, the importance of guarding against an importation of this disease should not be obscured by the greater attention devoted to cholera and yellow fever by reason of their comparative rarity. In this matter, however, much may be trusted to the sanitary inspections of vessels in British ports made in behalf of our Government.

THE CHESAPEAKE BAY QUARANTINE.

THE pilots of Chesapeake Bay having been stupid enough to recommend the transfer of the quarantine station from the Capes to the York River, it has remained for an official of a transportation company to point out the hazards that such a change would bring to passengers on the steamers plying regularly between points on that river and the port of Baltimore, as well as to the people living along the river. It is to be hoped that no class interests will gain popular support in opposition to the work of the Marine-Hospital Service.

CONTAGIOUS PLEURO-PNEUMONIA ON STATEN ISLAND.

IN a recent vigorous communication to the "American Dairyman and Stock Breeder," Dr. A. S. Heath, of this city, Lecturer on the History and Breeding of Domestic Animals, at the Columbia Veterinary College, calls on the State Board of Health to suppress the nefarious business of one Meyerbaum, who buys, sells, and slaughters sick cattle at Linoleumville. It is suggested that, when the cows get too sick for traffic in their milk to prove profitable, they are butchered, and their carcasses are sold to makers of "Bologna" sausages. It is thought that Meyerbaum's place is undoubtedly a perennial source of infection. Inasmuch as a member of the board lives on Staten Island, it certainly seems as if the matter ought to stand a fair chance of being attended to.

THE BUFALINI PRIZE.

IN accordance with the will of the late Professor Bufalini, a prize of 5,000 f. will be awarded for the most meritorious essay on the application of the experimental method in the sciences. Manuscripts, which must be in Italian or Latin, will be received until October, 1884. They should be sent to the Secretary of the Faculty of Medicine and Surgery of Florence.

NEWS ITEMS.

THE NEW YORK POST-GRADUATE MEDICAL SCHOOL.—Dr. Andrew H. Smith has been elected a Professor of Clinical Medicine and Therapeutics, and Dr. Alexander J. C. Skene, of Brooklyn, a Professor of Gynecology—not to fill vacancies, but to serve in conjunction with the present occupants of those chairs.

THE BALTIMORE MEDICAL COLLEGE.—The "Maryland Medical Journal" announces that Dr. G. Halstead Boyland has resigned the professorship of surgery, and that the vacancy has been filled by the appointment of Dr. G. Glanville Rusk, of Baltimore.

DARTMOUTH MEDICAL COLLEGE.—We learn from the "Boston Medical and Surgical Journal" that Professor O. P. Hubbard has resigned the chair of chemistry, after forty-seven years of service, and has been made professor emeritus; that Professor Edwin J. Bartlett will give the course in chemistry during the present session; and that \$2,000 have been received from the estate of the Hon. E. W. Stoughton for the benefit of the Museum of Pathological Anatomy.

THE TOULOUSE SCHOOL OF MEDICINE.—M. Caubet, Professor of Internal Pathology, has been appointed director of the school for a period of three years, in place of the late M. Filhol.

A NEW MEDICAL COLLEGE.—The "Pittsburgh Medical Journal" states that a charter has been obtained for an institution to be termed the Pittsburgh Medical College, but adds that preparations have not been completed for its organization.

THE PARIS ACADEMY OF MEDICINE.—M. Lannelongue has been elected a titular member of the section in surgical pathology. Of the eighty-two votes cast, he received fifty-four, M. Péan twenty-six, and M. Terrier one, the remaining ballot being blank.

THE MASSACHUSETTS STATE BOARD OF HEALTH, CHARITY, AND LUNACY has appointed Dr. A. B. Heath, heretofore the Port Physician of Boston, to be a medical inspector, in place of Dr. William L. Richardson, resigned. Dr. Arthur G. Griffin succeeds Dr. Heath as Port Physician.

THE CONNECTICUT MORTALITY RETURNS for June, for which we are indebted to the secretary of the State Board of Health, show an increase over the usual rate for the month, amounting in Hartford to as much as fifty per cent. The excess is not due to the special prevalence of any one class of diseases.

PROFESSOR H. NEWELL MARTIN, OF THE JOHNS HOPKINS UNIVERSITY, BALTIMORE, has been appointed the next Croonian lecturer of the Royal Society of London.

PROFESSOR OSLER, OF MCGILL UNIVERSITY, MONTREAL, says the "Canada Medical Record," has been elected a Fellow of the Royal College of Physicians of London.

THE ASTLEY COOPER TRIENNIAL PRIZE of £300 has been awarded to Dr. William Alexander, of Liverpool, for an essay on "The Pathology and Pathological Relations of the Disease known as Osteo-arthritis, or Chronic Rheumatic Arthritis."

A FEMALE PHYSICIAN IN ROME.—According to the "Deutsche Medizinal-Zeitung," the widow of Professor Boll, who is a daughter of Traube, has been made a doctor of medicine in Rome.

THE AMERICAN NATIONAL ASSOCIATION OF THE RED CROSS.—The President of this Association, Miss Clara Barton, Superintendent of the Female Reformatory at Sherborn, Massachusetts, is making preparations to meet the exigencies which may arise from an invasion of this country by cholera or yellow

Fever. Dr. J. B. Hubbell, of Cedar Rapids, Iowa, her special field agent, has been ordered to report to her in person, and everything is being made ready for immediate action in case of necessity. The Association has at present about \$15,000 available funds.

A BURIAL WITHOUT A PERMIT has recently come to light in this city—an occurrence deemed almost impossible, in view of the stringent provisions of the sanitary code. As a death certificate had been given, the issue of a permit is said to have been taken for granted by the keeper of the Morgue, and by his direction pauper burial was given the deceased. An organization to which the latter belonged has exhumed the body, and buried it in Calvary Cemetery.

OBITUARY NOTES.

PROFESSOR PACINI, OF FLORENCE.—Filippo Pacini, the distinguished discoverer of the Pacinian corpuscles, died on the 9th of July at Florence, in which city he held the position of Professor of Topographical and Microscopical Anatomy in the Istituto di Perfezionamento. He was in his seventy-first year.

JUDSON GILMAN, M. D., OF BALTIMORE.—Dr. Gilman died on Wednesday, the 1st inst., in his sixty-fifth year. He was born in Meredith, N. H., and received his preliminary education in Roxbury, Mass., and his collegiate at Colby University, Maine, and in 1845 graduated from the Medical Department of the University of Maryland. Dr. Gilman was prominent in the medical societies of Baltimore, in some of which he held the offices of president and treasurer for a number of years. He was a United States Army surgeon in the field in 1862-'63, and from October, 1863, until the close of the war, he was Acting Assistant Surgeon in hospitals at Point Lookout.

N. G. RIDGLEY, M. D., OF BALTIMORE.—We learn from the "Maryland Medical Journal" that Dr. Ridgley, who served in the Confederate army during the late war, died in Baltimore on the 4th of July, at the age of forty-two.

EDWARD MEAD, M. D., OF BOSTON.—Dr. Mead is reported to have been lost at sea by the wreck of the Portuguese barque Pimpao, on the coast of Pico, on the 28th of June, he being the surgeon of the vessel. He was born in England in 1819, and came to this country in 1832. In 1841 he received the degree of doctor in medicine from the Medical College of Ohio. He made psychiatry his special study, and was connected with several private asylums at different periods. He was a member of the Massachusetts Medical Society.

Letters to the Editor.

IS THE CODE CONTROVERSY A CASE OF TWO MEN AND THE SHIELD?

BUFFALO, August 2, 1883.

To the Editor of the New York Medical Journal:

SIR: The appearance of an article entitled "What is a Consultation?" in the "Ephemeris" for July led the writer to make a review of the code controversy literature, which brings him to the conclusion that the heat of the discussion is the result of a misconception upon the part of the supporters of the old code of the wishes and motives of the new code party—that the former were ready to die in the last ditch rather than submit to the establishment of certain relations between the profession and

the homœopathists, which relations the latter never thought or desired to establish.

The irate last-ditchers have been ready to die daily rather than do that which no one ever thought of asking them to do; and it would also seem that the pestilent introducers of irritating innovations, who seek with their new notions to break up the time-honored usages of the profession, have been quite mistaken in regard to the liberal and catholic spirit of the code of the American Medical Association.

All this confusion and noise, this passing up and down of the canvasser, this pledging or refusing to be pledged, this throttling or trying not to be throttled, this iron-clad oath which each must take or go home with the fear that he is not quite regular—all this has been, and is, and is yet to be, because the parties would not take the pains to look at a certain object from a common ground, but would go on with the old contention, "I say it is red," and "I say it is blue"—the only variation from the fable being that each insisted in naming the color, not of his own, but of the other man's side of the shield.

Your correspondent, seeing something of this inclination, in a discussion of the subject reported in the "Buffalo Medical and Surgical Journal" for September, 1882, page 74, gave the other man this invitation to step across and look at the matter from his point of view:

Before concluding, I must remark, in passing, upon what seems to be a unanimous misconception of the supposed action of the code of 1882.

It would seem from the reports of all the official actions and most of the individual utterances upon this subject, from the august American Medical Association down to the humblest local medical society, that the logical action of the code of 1882 is to recognize homœopathy, Hahnemannism, infinitesimalism, and all the allied delusions. That to meet a man in consultation is to extend to him full fraternal recognition, to undertake to confirm his diagnosis and to support his treatment.

This seems to be the popular conception of the action, and the only possible action, of our new code; and I wish simply to remark that nothing could be more false or misrepresenting. To my mind the action of the new code is: first, to say to the people, we bow in acquiescence to your authority and recognize the homœopathists as physicians; second, to say to the homœopathists, we will meet you where and when you will, and treat you with exact fairness and justice, recognizing that consultation is for the benefit of the patient, and that in case we disagree, as we are likely to, regarding diagnosis and prognosis, and are sure to about treatment, we will be governed by our code for such cases made and provided. That legal recognition and consultation mean or necessitate full fraternal recognition and relationship, I am sure never for a moment entered the minds of the framers or advocates of our new code. The general impression seems to be, that willingness to consult implies on our part all the rest; to my mind it simply implies formal official recognition of the relations of the homœopathists to the State. We accept their credentials and allow the developments of the future to decide whether their relations to us will ever be more than formal recognition. The laws of the State, the temper of our people, and the genius of our institutions demand this, but, as we are not allowed to proscribe them for opinion's sake, they can not coerce our indorsement of their doctrines.

Your correspondent is not aware of any one having accepted this invitation, but the object has been accomplished by different means; the other man has taken occasion to tell, not of our own, but of the color of his side, and in faith it is just like ours, as any one can see.

Dr. E. R. Squibb, in the article above referred to, says:

If a surgeon or other specialist be sent for by a patient or by an irregular physician, and treats any special case by his own skill and principles and judgment—no matter whether the irregular continues to see the patient or not—is that a consultation? Certainly not, for

there is no council held, and no violation of principle, but, on the other hand, there is a triumph of principle against which want of principle can not long stand, for honesty, truth, justice, and humanity all underlie and support such action, and therefore the old code supports it.

Is a practitioner when summoned, whether in emergency or not, to stop to inquire whom he is to meet at the bedside in order to avoid heterogeneous consultations as if he were mortally afraid of them? Certainly not, since even the meeting with irregulars does not constitute consultation with them; and if he meets them and does his best for the patient, without admitting professional fellowship, and without holding council, or permitting the appearance of holding council, and holding out to the patient a free choice as to whom he will choose to conduct his case, and stating the plain reason why he can not have both, there is no consultation and no conflict with the old code of ethics.

If a physician be sent for to meet one or more irregular practitioners in consultation upon a difficult or critical case, must he decline the meeting? Certainly not. He *may* go. And perhaps, if his sense of moral rectitude and justice be very high, he may decide that he *must* go. But he will most certainly decline consultation when he gets to the meeting. He will make clear his readiness to see the patient if that be desired, and to do the very best he can for him; but he will distinctly decline to do this jointly with those whose avowed or tacit principles of action are so antagonistic to his that one side only can be the right. If the patient or friends insist in the name of humanity, and for the sake of a beloved child or relative, that he should remain in joint management, and assist by his counsel and experience, is he then justified in such consultation? No; for if he can not make the patient and friends understand that the presence of either the regular or the irregular practitioner must, in the nature of cause and effect, be detrimental to the interests of the patient, then he must withdraw by the force of his own principles of probity and honor, and submit to popular adverse criticism, and even newspaper misconstruction and abuse, if need be. But first he will earnestly strive to convince the patient that either course of treatment is surely better for him than any admixture of incompatibles.

If at the request of a patient or friends a regular practitioner takes charge of a case, and an irregular practitioner is, by the family, retained in attendance, even if visiting the patient at the same hours, or present at the treatment, is this a consultation? Not if there be no holding council to deliberate upon the case—no acknowledgment of a joint responsibility, no admission to professional fellowship and equality, nor any admixture of treatment. The irregular is then not a consultant, but a spectator, or may even be a nurse.

The line is not difficult to draw in any of these cases, and although it will not be exactly the same line as drawn by different individuals and under different circumstances, yet it will always be coincident in effect if drawn in obedience to the plain rules of honor and honesty and the plain meaning of words. And, if it be carefully drawn with that unselfishness which first thinks of the feelings of others, it will always be done with politeness and courtesy.

To the writer this view of the code of the American Medical Association is as new as it is satisfactory, and if this is the correct construction no other code is needed.

Although, from the dignity of his character and the propriety of his methods, Dr. Squibb can be cited as the professional leader of the old code party in this State, yet his interpretation is only that of an individual.

To make the matter complete, it is necessary for his construction to be ratified by the judicial council of our national association.

In case that body should feel a hesitancy about acting upon such an important matter, without the same being first referred to it from the association at large, it will only be necessary for the council to recall the action taken before the late meeting at Cleveland, regarding the iron-clad oath, to discover a perfect precedent for that required in this case.

By all means let us hear from messieurs the judicial council.

H. R. HOPKINS.

Proceedings of Societies.

NEW YORK MEDICAL AND SURGICAL SOCIETY.

A STATED meeting was held February 24, 1883, Dr. T. GAILLARD THOMAS, President, in the chair.

ACUTE MANIA RELIEVED BY ANTI-SYPHILITIC TREATMENT.—Dr. F. N. OTIS related the case of a young man under his care as follows: The patient had been abroad, and had probably led a somewhat dissipated life, but on his return was in an excellent state of health. Shortly afterward, however, he showed symptoms of acute mania; two prominent alienists pronounced his case one of commencing paresis, and gave a very unfavorable prognosis. After remaining in Bloomingdale Asylum several weeks, contrary to expectation he became quite rational, and then said that he had been undergoing a course of anti-syphilitic treatment, and within a short time a syphilitic papular eruption developed. He had now perfectly recovered from cerebral symptoms. There was enlargement of the lymphatic glands. Dr. Otis remarked that he had seen several cases in which the papular eruption of syphilis had given rise to disturbances in different parts of the body which seemed to be due to the presence of a papule, or an accumulation of cells of which it had been proved papules consisted, at some place within the body. Such an accumulation of cells was seen to occur sometimes under the periosteum of bones, constituting nodules. Apparently the same thing occurred also in the anterior chamber of the eye, and seemed to be connected with the iris, constituting a condition called by oculists gummy tumor of the iris. These tumors passed away under the same general treatment that was adapted to the active stage of syphilis. He had also seen a case in which an acute attack of jaundice developed in connection with the papillary stage of syphilis, and disappeared with the disappearance of the syphilitic symptoms.

Dr. A. CLARK asked Dr. Otis if he attributed the recovery from the cerebral symptoms in this case to treatment with mercury.

Dr. Otis replied that he did, and that the principle of the cure was that the drug had caused an absorption of the papillary material, if one chose so to call it, that had probably been deposited in the membranes of the brain and which had given rise to symptoms by pressure.

The PRESIDENT asked Dr. Otis if he thought his patient would entirely recover from syphilitic disease.

Dr. Otis replied that he thought he would; he saw no reason why he should not. It was an ordinary case of syphilis which happened in the first stage to develop this peculiar constitutional phenomenon, which was no more likely to occur in a severe case than in a mild attack. There was no reason, so far as he knew, why a papule should not develop at some point in the central system, and give rise to corresponding phenomena, than that it should not develop at a superficial point of the body.

Dr. A. C. POST remembered to have once seen a case of inherited syphilis in a young child about six months old, with enlargement of the head, apparently from hydrocephalus, and with a certain amount of stupor and strabismus. The child was relieved by mercurial inunction.

The PRESIDENT asked Dr. Otis whether he had ever known a case of constitutional syphilis which was cured in the early stage never to manifest symptoms afterward.

Dr. OTIS replied that he thought it was of very common occurrence. He believed that the majority of cases of syphilis never manifested tertiary symptoms. This was particularly true where treatment had been begun early after contraction of the disease. It was only exceptionally that we met with a typi-

cal case of syphilis, where the patient went through all the stages of the disease. He had made some observations recently which demonstrated a tendency on the part of the papule to reappear at the same place a number of times. In one instance it was observed to return eight or ten times. Probably the part had become more vulnerable from the appearance of the papule on previous occasions.

Dr. B. W. MCCREADY mentioned the case of a man who, about thirty-five years ago, contracted syphilis and married before the primary lesions were entirely recovered from. The first child from the marriage was weakly, the teeth and the nails were badly formed, indicating hereditary syphilis. The child, however, lived to grow up, and was apparently in perfect health to-day. Several other children were born, and died before the end of the second year, two of them of hydrocephalus. There was one delicate girl, and another child well-built and strong. In the meanwhile the father had become perfectly well, and was still an active man. The mother was stout and well. In another instance a small, active, nervous man, of excellent health, married a very healthy woman, who gave birth to a boy and a girl. The boy, who was delicate, contracted bad habits, and died in early life; the daughter was delicate, excessively nervous, married, and died rather suddenly. The father also died, perhaps indirectly of alcoholism. On inquiring into the family history, Dr. McCready learned, through Dr. Bumstead, that the father had suffered from syphilis, to which Dr. Bumstead attributed the weakly condition of the children.

Dr. OTIS remarked that physicians and patients were very prone to look up a syphilitic history whenever anything occurred which they were not able to understand; and, if the least evidence of the existence of syphilis in the family were obtained, everything was made clear. If no evidence of syphilis was obtained, then the case was put down as one of struma, or some mysterious hereditary taint not syphilitic. He believed these cases to be so entirely opposed to all that we knew positively with regard to syphilis, and had been so indefinitely reported, that they could hardly be brought forward as evidence of much value in determining that such constitutional peculiarities were due to the effect of this disease. Fournier, in his work on "Syphilis and Marriage," related a case which he believed illustrated the fact that in some instances syphilis could be communicated in an active form years after the manifestation of primary symptoms, and the entire foundation of the case rested solely on the supposed fidelity of a mistress to her master. Such and similar evidence could not be accepted upon which to base so important scientific conclusions. On the opposite side, however, Fournier had reported eighty-five or eighty-seven cases which had come under his observation, showing that the disease became entirely eliminated from the system, so far as its power of contagiousness was concerned, after the lapse of a certain length of time. In some of the cases marriage was contracted from a year and a half to five years after the first lesions of syphilis manifested themselves, and the disease was not communicated to the wife or to the children.

Dr. MCCREADY remarked that while in the case which he reported syphilis may not have been transmitted in an active form to the children born after the lapse of some years from the contraction of the disease on the part of the father, yet it probably had had such an effect upon the parent's constitution that offspring of an imperfect organization was the result.

Dr. OTIS remarked that there was a difference between inherited syphilis, the result of a contagious principle, and an inherited weakly condition of the body as a sequel of the disease. It was well known that women who had had syphilis might give birth to miserable, unhealthy, deformed children, the

sequelæ of the original disease, but it did not necessarily follow that such children were syphilitic.

Dr. Post mentioned the case of a man who had had syphilis from which he supposed he had entirely recovered. He married, and was the father of a number of healthy children, none of whom showed any signs of syphilis. After a number of years a phagedenic ulcer, probably a tertiary symptom, destroyed his nose and a part of the upper lip. Dr. Post also referred to the case of an eminent surgeon who had a well-marked Hunterian chancre develop on the finger after the examination of a syphilitic patient. Other symptoms of the disease manifested themselves, and later, partial paraplegia.

POISONING WITH ILLUMINATING GAS TREATED BY THE INHALATION OF OXYGEN.—Dr. ALONZO CLARK reported two cases, an account of which will be found on p. 148.

Dr. Post remarked that a patient was brought to the Presbyterian Hospital during the past year suffering from poisoning by illuminating gas, and during a consultation of the physicians the question of the administration of oxygen was raised, and was objected to on theoretical grounds, the exact nature of which he did not remember. It was not administered, and the patient died shortly after admission.

Dr. H. B. SANDS asked Dr. Clark whether he knew what kind of illuminating gas had been inhaled by the patient.

Dr. CLARK replied that he did not; the patient lived in Fourth Street.

Dr. SANDS said he had been told recently, by a gentleman who was familiar with the process of making gas, that the so-called water-gas was far more poisonous than the ordinary kind (containing the oxide of carbon in large quantity).

POSSIBLE ÆTIOLOGICAL RELATION OF CANCER TO A SIMPLE APPLICATION TO THE CERVIX UTERI.—The PRESIDENT related the following case: A week ago he was called to see a lady, whose history was given by her physician as follows: He was called to see the patient three months before. She was in good health, and had sent for him simply because of a slight leucorrhœa. She was about thirty-eight years of age, and had given birth to children. The doctor, on introducing the speculum, found a glutinous discharge coming from the cervix, which he supposed to be due to ordinary cervical leucorrhœa. He introduced a small cotton tampon, with a thread attached, dipped into a solution of nitrate of silver, twenty grains to the ounce, packing it in about the cervix, allowing none of the fluid to come in contact with the vaginal wall. The patient complained afterward of a burning pain, but, by the advice of her doctor, allowed the tampon to remain in place until he was about to leave the house. The pain was then so severe that she withdrew the tampon. Returning again in the evening, the doctor found the patient walking the floor, in intense agony, and suffering from a desire to make urine, of which only a few drops mixed with blood passed at a time. She said that after he had left the house the burning pain of which she had complained steadily grew worse. Opiates in large quantities were administered, and the vagina was syringed out frequently with water. He told her that the symptoms would pass away by morning. But, being sent for the next morning, he found acute inflammation of the vagina and of the urethra, and a good deal of cystitis. The urine was passed every hour. Dr. Thomas said that this condition of things had lasted up to the present time—a duration of three months. The patient had become emaciated to an extreme degree, having lost about thirty pounds. As the case advanced, she was taken with violent pain in one hip, which extended downward, and for the relief of which large quantities of opium had been taken during the past three months. When Dr. Thomas examined the patient, he found the posterior lip of the uterus entirely destroyed by cancer. There was

nothing specially interesting about the case, except the remarkable coincidence of an acute attack of vaginitis, urethritis, and cystitis being immediately followed by cancer of the cervix.

Dr. THOMAS remembered that one of the most violent attacks of vaginitis that he had ever met with was due to one or two drops of a saturated solution of chromic acid, which was being applied to the cervix, coming in contact with the vaginal mucous membrane. The attack lasted for three or four weeks, and the patient being a very nervous woman, he was much alarmed as to the final result.

Dr. SANDS asked the President whether he thought cancer would have developed in this case had the acid application not been made.

The PRESIDENT replied that he certainly thought it would. He had never seen a case of cancer develop from even a most violent attack of vaginitis, nor from any other acute inflammation.

CANCER DEVELOPED FROM A NON-MALIGNANT SORE.—Dr. SANDS said that a man came to his college clinic in the early part of last autumn to consult him with regard to a swelling of the neck, which, he said, had immediately followed an injury received some weeks before in a scuffle. On the next morning after sustaining the injury he perceived that his neck was swollen, which swelling persisted. Dr. Sands found a swelling on the left side of the neck, at about equal distances from the upper and the lower limits, the nature of which he was puzzled to understand. The swelling was of the size of a large almond, fluctuated, and yet did not seem to be an abscess. The man was quite sure that nothing was the matter with him before this injury had been received. It was probably a hæmatoma. The man went to the hospital, the tumor was aspirated, and about an ounce of serum streaked with blood was withdrawn. The swelling reappeared, and a week later an incision was made with the knife; blood-clots were removed, together with the thickened cyst-wall, which seemed to have been due to an inflammatory deposit covered by thick layers of lymph. A strong solution of carbolic acid was applied, a drainage-tube was inserted, antiseptic dressings were applied, and the case did well for about a month. At the end of that time he got up, and intended to go out of the hospital, but was seized with a chill, and, on examining the neck, it was found that the wound had not closed, and on the following day Dr. Sands enlarged the opening, and found a considerable quantity of pus. From that time there was a repetition of chills at frequent and irregular intervals, which led him to suspect pyæmia, but they proved to be the precursors of fresh abscesses, as many as six of which were opened within as many weeks. Although the drainage was good, the inflammation extended and finally involved a large part of the left side of the neck. The general health was failing. A deep sinus in the neck was then explored, and the tissue in the neighborhood was found to present an appearance of soft cancer. Then for the first time it was suspected that the case was one which had degenerated into malignant disease. His suspicions were confirmed on microscopical examination of a part of the cancerous tissue. The man died two or three days ago. It seemed evidently a case in which a sore, non-malignant in the beginning, changed its character, and became undoubtedly cancerous in the end.

Dr. Post remarked that he had a case last year in which cancer developed at the seat of an old gunshot wound received at the battle of Bull Run. Microscopical examination showed that it was a cancerous growth.

The PRESIDENT had related a case to the society on a former occasion to the following effect: A physician brought a young married woman, twenty-five years of age, to the Woman's Hospital, with the evidence of abscess in the cellular tissue about

the uterus. The abscess was found to be of about the size of a duck's egg; the patient was suffering a good deal of pain from cellulitis excited by some application made to the cervix uteri for cervical catarrh, which had produced sterility. About an ounce or an ounce and a half of laudable pus was found in the abscess. The patient was kept in bed three or four weeks, and was then suddenly taken with profuse hæmorrhage, which was found to come, not from the uterus, but from the seat of the old abscess. Careful physical and microscopical examination showed that cancer had developed, of which the patient died within about a year.

In another case, a healthy woman, on leaving the house, slipped on the icy steps and fell upon her buttocks, confining her to the bed a week or ten days. Shortly afterward hæmorrhage occurred from the uterus, and six weeks from the date of the fall well-marked cancer of the womb was discovered. The malignant disease had probably existed before the patient fell, but as symptoms did not manifest themselves until afterward, it was natural that the patient should attribute them to this accident.

TAIT'S OPERATION FOR THE REMOVAL OF THE OVARIES.—The President prefaced the relation of a second case with some remarks upon the operation first performed some years ago by Hegar, of Germany, for removal of the ovaries in cases of large fibrous tumors of the uterus for the purpose of diminishing their nutritive supply and checking their growth. A paper was read upon the subject by Mr. Knowsley Thornton, at the last meeting of the American Gynæcological Society. The operation had been represented to be a very simple one, easy to perform, and comparatively without danger. The President had performed it in three cases, had attempted it in a fourth, and it seemed to him beyond question an exceedingly difficult operation, very much more dangerous than ovariectomy even in cases of large tumors, and in a large number of cases it would probably prove fatal. His first two patients were operated upon in October and November last. The tumors were large, but after the removal of the ovaries they steadily diminished in size. The patients made a good recovery. The third case was operated upon a month ago; it was found to be almost impossible to remove the ovaries, they were bound down so tightly by adhesions and surrounded by masses of lymph due to repeated attacks of peritonitis. This patient died of septic peritonitis. The last case was operated upon to-day. The tumor was of the size of a large coconut. The patient was twenty-eight to thirty years of age, had been in the hospital three months, suffered extremely at the menstrual epochs, and lost much blood, although the tumor was not situated in the uterine cavity itself. Her sufferings were so great that she clamored for an operation. To-day an incision was made along the linea alba, the hand was passed down, and the left ovary was found so strongly fixed to the pelvic tissues that it could not be removed except by tearing it loose from its attachments. The right ovary was found to be bound down in a similar manner, and in a state of cystic degeneration. Remembering his experience in the other cases operated upon, he felt that to remove the ovaries under the circumstances was an unwarrantable procedure, and they were left in position. Moreover, although the patient suffered a great deal, life was not really in danger. He mentioned the case simply to express his opinion that the operation was an extremely hazardous one—much more dangerous than the operation for the removal of large ovarian tumors.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

A STATED meeting was held March 8, 1883, the President, Dr. JAMES TYSON, in the chair.

CANOE INVOLVING THE STOMACH, LIVER, PANCREAS, RECTUM, AND LUNG.—Dr. GUY HINSDALE exhibited a series of specimens obtained from recent cases at the Episcopal Hospital.

CASE I.—Carl W., aged forty-four, was admitted October 23, 1882. He had never been ill before, and his symptoms had been developed during the two weeks previous to admission. His bowels were regular, he had had no vomiting, but had pain at the lower margin of the left ribs, with cough and friction sounds. Cachexia was marked. The abdomen was soft; a tumor was felt in the left hypochondriac region. The spleen was distinctly felt, and enlarged.

The tumor increased in size, became more tender, and pain was at times very severe. The patient's appetite was gone, and emaciation was extreme. Twenty-six days after admission death occurred.

At the autopsy, fluid was found in the pleural, pericardial, and abdominal cavities. There were old pleuritic adhesions. The roots of the lungs, the base of the left lung adjacent to the diaphragm, and the pleura beneath the ninth and tenth ribs, were found to be the seat of cancerous deposit. The bronchial and thyroid glands were very much hypertrophied, but not cancerous.

The cardiac extremity of the stomach was the seat of an extensive cancer, but the cardiac orifice was not involved, and the mucous membrane not destroyed. The pyloric end was intact. The pancreas was the seat of cancerous growth. The liver was of a dark, mottled color, and showed numerous metastatic growths in an early stage of development; its weight was 5 pounds 9 ounces. The spleen was greatly enlarged, and the seat of small secondary deposits. Kidneys normal.

Microscopic sections of the thyroid gland showed simple hypertrophy; sections of the metastatic growth in the liver showed scirrhous cancer.

CASE II.—James S., aged forty, admitted September 28, 1882. During two months previous to admission he had lost forty pounds of flesh, his skin had become very sallow, and vomiting, which at first was occasional, finally occurred after every meal. A tumor was distinctly felt on the left side above the umbilicus; it moved with respiration, and was painful on pressure. Albumin was present in the urine. The patient's mother had died of cancer of the stomach.

After admission, the tumor increased in size, the patient grew weaker, vomiting frequently and passing clay-colored stools. Death occurred on the thirty-eighth day after admission.

At the autopsy, the heart, lungs, kidneys, and spleen were found in a normal condition; the stomach was very much dilated, and contained undigested food. A cancer was found at the pyloric extremity. The walls of the pylorus were very much thickened, and its orifice admitted the thumb with difficulty.

The liver was detached, and found to be the seat of four large bosses of secondary cancer. Its weight was 3 pounds 14 ounces. The gall duct was unobstructed.

A microscopic section of the growth in the stomach showed scirrhous cancer.

CASE III. CANCER OF THE STOMACH; GASTRO COLIC FISTULA.—C. W., aged sixty-six, was admitted June 13, 1882. His health had been good until four months previously, when he vomited some dark, bloody matter. Pain was occasional, and occurred after eating. Vomiting had occurred once. Jaundice began three weeks before admission; the skin was dry, and the body not much emaciated. Stools regular, but clay-colored. The liver was slightly enlarged. Distinct nodular masses, slightly painful on pressure, could be felt in the epigastric and umbilical regions. The inguinal glands were slightly enlarged; the axillary glands

remained normal. There was no cough. A faint, low systolic murmur was heard at the aortic cartilages. The urine was dark-yellow, sp. gr. 1.010, and contained no albumin. Vomiting, emaciation, and jaundice progressed, the tumors increased in size, and death occurred two months after admission.

At the autopsy, a cancer was found at the pylorus. A fistulous opening, large enough to admit the forefinger, was found to exist between the stomach and transverse colon, which were infiltrated by the cancerous deposit and adherent to each other. The caliber of the colon was small. The mucous membrane of the stomach at the seat of disease was ulcerated and ragged. There was no dilatation or hypertrophy of the walls of the organ. The gall-bladder was distended, and both the pancreatic and common bile duct were obliterated. Heart, kidneys, and other organs showed nothing very unusual. The mesenteric glands were slightly enlarged. The spleen was small, and its hilus the seat of a hard, calcareous plate; the organ was displaced, lying close against the diaphragm, some distance from the chest-wall, accounting for the perfect resonance which had been noted in the splenic region.

CASE IV. RECTAL CANCER; COLOTOMY.—John M., aged seventy-one, was admitted to the hospital October 26, 1882. He had always been healthy until three months previously, when the movements of his bowels became irregular.

The patient suffered from diarrhœa. His urine was albuminous, and contained hyaline casts. He had hydrocele. He denied specific history. Exploration of the rectum revealed a malignant stricture an inch and a half from the anus.

On account of the patient's age, operative measures were not contemplated until the passages became very difficult and hicough and stercoraceous vomiting demanded relief. This was temporarily afforded by the operation of left lateral lithotomy, which was performed by Dr. John H. Packard. Death ensued twenty-four hours later.

At the autopsy, the wound was found in good condition; the descending colon was opened about three inches from the point of its bending downward. An enormous cancer was found involving the rectum and posterior wall of the bladder, and nearly filling the true pelvis. All the other viscera were in good condition. Microscopic sections showed the cancer to be scirrhus.

CASE V. CANCER OF THE RECTUM; SECONDARY CANCER OF THE LIVER.—Christian H. was admitted July 6, 1882. He was emaciated, weak, and cachectic. He stated that for twenty-seven years he had been perfectly well, but that two months previously he had noticed loss of flesh, and about the same time discovered at the anus a growth which was small, but which gave him a great deal of trouble at stool.

Two weeks later he noticed that his feet and legs had become swollen, but it was not till his admission to the hospital that he became aware that there was anything the matter with his abdomen. The patient's father probably died of cancer of the stomach.

The anal growth was excised, and proved to be an adenoid type of malignant disease. Vomiting, dyspnœa, and sallowness of the skin increased until his death, five weeks after admission. The autopsy showed that the liver and rectum were the only structures seriously diseased. The liver was enormously enlarged, and filled the whole upper portion of the abdominal cavity. It was slightly adherent to the diaphragm and adjacent viscera, and was studded with cancer nodules, varying in size from that of a filbert to that of an egg, often coalescing and pretty equally distributed over the surface. The whitish color of these nodules was in strong contrast with the dark color of the liver, giving it a variegated appearance. Its weight was 10 pounds $4\frac{1}{2}$ ounces. The walls of the rectum, six inches from the anus, were infiltrated with the new growth. This was

the primary seat of disease. The secondary growth was very rapid, almost entirely painless in itself, and disturbing the patient only by mechanical irritation of the stomach, and the production of œdema and ascites by interference with the circulation. Jaundice did not occur.

Microscopic sections of the anal growth revealed an adenoid growth resembling an aggregation of Lieberkühn's crypts. It was an example of an early involvement of the part. The growth higher up in the rectum was more advanced, and illustrated the encephaloid form of the disease. A section from the metastatic deposit in the liver showed a stroma of fibrous tissue, with alveoli lined by epithelial cells, the peripheral cells retaining their columnar shape. It was an example of the reproduction in the liver of the same follicles found in the primary disease of the rectum.

OSSIFICATION AT THE AORTIC ORIFICE.—A unique specimen was exhibited by Dr. J. T. ESKRIDGE. It was sent him from a distance, and consisted of about one inch of the cardiac end of the thoracic aorta, the aortic semi-lunar valves, and the immediate portion of the heart. The specimen was removed from a man who, aged about seventy, had suffered a number of years from severe heart disease. The walls of the large arteries were thickened, rigid, and contained numerous deposits of inorganic matter. The left ventricle was enormously enlarged. He was unable to obtain any information with regard to the condition of the cardiac valves other than those of the aortic orifice.

Description of the Specimen.—The aorta, where it surrounded the valves, for about half an inch in extent, was a hard, unyielding substance of fibrous tissue and calcified and ossified matter. The valves in several places were about one fourth of an inch thick, and seemed to have been almost entirely transformed in to bone-like material. They were rigid and immovable, and had almost completely cut off all communication between the heart and aorta. One of the leaflets, about three fourths of an inch in all directions, with its vegetations, stretched across the aorta, lay against, and was apparently adherent to, the other segments of the valves, the latter being curled upon themselves. The central portion of the aorta was entirely occluded, and only two small openings, through which the blood could have escaped from the left ventricle, were seen between the valvular leaflets near their peripheral attachments. The larger of these holes admitted a flattened probe three mm. wide by one thick; the smaller was about two thirds as large. Three other smaller orifices had existed, but these were obliterated before death by a thin, fibrous, transparent membrane, which was still seen. The valves on the cardiac side were tolerably smooth, but on the aortic side they were very rough, one of the leaflets supporting a vegetation ten mm. long. One of the segments of the valves was adherent to the inner coat of the aorta for about half an inch in extent, the free end of the valve being folded upon itself and pointing toward the nearly closed aortic orifice. After macerating the specimen in water for forty-eight hours, the diseased valves still remained inflexible.

DRS. FORMAD, DUNN, GRIFFITH, and ERWARDS reported having similar, or nearly similar cases.

DRS. TYSON and NANOREDE called in question the correctness of calling the disease *ossification* of the valves, as it was in reality a *calcification*.

DR. SHAKESPEARE concurred in this view, and thought that ossification rarely, if ever, occurred in this situation.

DR. ESKRIDGE said that Hayden ("Diseases of the Heart and Aorta," vol. ii, p. 839) referred to bony deposits in the aorta and its valves as follows: Sir Dominic Corrigan exhibited before the Pathological Society of Dublin (see Proceedings, vol. ii, New Series, February, 1864) the heart of a young woman in which the root of the aorta had undergone complete osteoid

transformation; it was likewise greatly dilated, and the aortic valves had been rendered thereby inadequate. During the patient's last illness, a systolic murmur of metallic quality, appropriately designated a "trumpet-bruit," was audible at the base, and in the ascending aorta and carotid arteries; there was likewise a soft diastolic murmur. He regards a "trumpet-bruit" as absolutely diagnostic of bony deposit in the aorta, either in the form of a "rim of bone," or a "projection or tongue of bone." In the same paragraph Corrigan refers to Dr. Banks's specimen of a "tongue of bone" projecting into the aortic orifice.

REPORTS OF THE COMMITTEE ON MORBID GROWTHS.—"A microscopic examination of a section made from the growth removed from the uterus and presented by Dr. PARISH, December 28, 1882, shows it to be adenomatous in structure, consisting of small cavities or spaces lined with cells, which cavities are separated from one another by fibrillar connective tissue." "A section of the lymphatic gland, presented by Dr. PARISH December 28, 1882, shows that its normal structure is metamorphosed into that of a carcinomatous nature, consisting of an alveolar fibrous stroma, having the spaces filled with cells of an epitheliomatous type." Report on Dr. ESKRIDGE's specimen of brain, lung, liver, spleen, kidney, and bladder troubles, presented November 9, 1882. "A section made from one of the nodules of the liver, presented by Dr. ESKRIDGE, examined microscopically, shows it to be a new formation, consisting of epithelial cells placed in alveolar spaces, the tissue forming the alveolar walls being fibrillar connective tissue. The cells in the spaces at the periphery of the groups, and lying next to the alveolar walls, have a columnar shape, and are quite regularly arranged, while those of the center are flat or squamous epithelial cells. The neoplasms are cylindrical-celled epithelioma. The post-mortem changes undergone by the brain were such as to prevent any satisfactory histological examination being made."

"A section of the growth, presented by Dr. NANCREDE, January 11, 1883, for Dr. Seltzer, on microscopical examination, shows it to consist of an external covering formed of the histological elements and arrangement as found in the skin; the papillæ were in places much atrophied and flattened, also in some parts elongated. There were no hair follicles, sweat, or sebaceous glands in the section. Below the papillæ were seen fibrous tissue, at some points in an active state of proliferation, and numerous blood-vessels. The growth is a fibrous polypus."

A TUMOR COMPOSED OF MILIARY TUBERCLES OF THE SUBCUTANEOUS ADIPOSE TISSUE CONNECTED WITH ONE OF THE ANTERIOR CUTANEOUS BRANCHES OF THE LUMBAR NERVES.—This was exhibited by Dr. NANCREDE, who said the patient from whom this truly unique tumor was removed was a young girl of eighteen years of age, who, for four years past, had had occasional coughs, with, at times, some bloody expectoration, but was able to attend to her occupation of housework. Her family history was not characteristic in any way. About one year since she thought that she "strained herself," since when she has been subject to severe attacks of abdominal pain, which extend to various portions of her body. She was admitted to the Female Medical Wards of the Episcopal Hospital last fall, where dullness on percussion and harsh respiration at the apex of one of the lungs were detected. During December, 1882, the pains increased, and the right thigh became flexed upon the abdomen. A small, exquisitely sensitive, nodulated tumor was now detected just to the outer side of the right rectus abdominis. Dr. Morris J. Lewis, by whose kindness I am enabled to present this specimen, then asked me to see the case with him. Under ether I found a nodulated mass, beneath but attached to the skin, and freely movable upon the deeper parts. I then thought that the growth was one of the ordinary so-called neuromata—i. e., usually fibrous growths in connection with some nerve, and that the pains were

reflex, as was also the flexion of the thigh. February 20, 1883, I accordingly removed the growth, which, to my surprise, was markedly infiltrated, and only at one spot in any sense encapsulated, where it evidently had developed around a small cutaneous nerve and artery. The wound did badly, and has left an indolent ulcer; *but all the reflex pains and flexion of the thigh have disappeared*, while the lung is breaking down, yet the patient is gaining flesh, and looks and expresses herself as much better, and thoroughly satisfied with the results of the operation. I have termed this growth "unique" because I believe that none such have been reported—i. e., subcutaneous masses of tubercle, large enough to require the surgeon's knife, and liable to be mistaken for other neoplasms. The present growth was about an inch in its various diameters, as far as could be estimated. Microscopically, sections show fibrous and adenoid tissue, with giant-cells, according to the kind report of my friend, Professor Simcs, whose observations have been confirmed by Dr. Fornad and other pathologists as well as by myself.

Dr. G. G. DAVIS said that he had seen a somewhat similar case in the clinic of Professor König, of Göttingen. A young man had a subcutaneous tumor just above and to the outer side of the patella. It was about one inch and a quarter in diameter, and perfectly circumscribed. It and a portion of the joint-capsule, including the part to which it was attached, were excised antiseptically. On the synovial membrane were found a number of what appeared to be miliary tubercles. There were no other evidences of tubercular disease, and he recovered with a good, movable joint. Professor König regarded the case as one of true localized tuberculosis. He examined the excised portion microscopically. The tumor was hard, but had undergone cheesy degeneration.

Dr. NANCREDE thought that this interesting case related by Dr. Davis still left his own unique, as Professor König's case evidently had its origin from the synovial membrane, which was so closely related to the other serous membranes, which, as is well known, are so very prone to miliary tuberculosis.

C. B. NANCREDE, M. D., *Recorder*.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

A STATED meeting was held April 5, 1883, the President, R. A. CLEEMANN, M. D., in the chair.

CALCAREOUS PARTICLES PASSED *per Vaginam*.—The specimens were shown by Dr. W. GOODELL. The previous history had been that of menorrhagia, and multiple fibroids were found in the womb. One of these fibroids had evidently taken on calcareous degeneration, and had subsequently broken down, and discharged these fragments into the uterine cavity. He stated that these particles were not true bone, but merely the product of a disorderly deposit of lime, which possessed none of the osseous elements, not even cartilage corpuscles. This calcareous degeneration tended to cure the disease by breaking off the vascular filaments of attachment and lessening the nutrition of the fibroid. In one instance, the specimen of which was now in the Museum of the University of Pennsylvania, he had seen three fibroids wholly converted into stone. These stones were, however, very light, and not like those of the bladder. It was the expulsion *per vaginam* of these uterine calculi which had greatly puzzled the older anatomists.

STONE IN THE FEMALE BLADDER ASSOCIATED WITH FISTULOUS CONNECTION WITH THE BOWELS.—Dr. GOODELL also exhibited two calculi, and related the following histories of two cases: The first case was that of a patient of Dr. C. A. McCall, who sent her to him in October, 1881. For the preceding four years she had suffered very much from vesical tenesmus. She frequently broke wind *per urethram*, and often passed through the same

channel the seeds of raspberries, of tomatoes, and of pears. A year before Dr. Goodell saw her she had voided a great deal of her urine *per rectum* for several weeks. Dr. Goodell detected two stones in the bladder and removed them. At once all the symptoms of fistulous connection between the bladder and the bowels disappeared, and the patient got well. This rapid recovery led him to think that there had not existed any fecal fistula, but that the vesical tenesmus was so great as to cause a rectal tenesmus which was masked by the former, and that the seeds and urine were voided *per rectum* unconsciously by the woman when attempting to empty the bladder. But he had been led to change his views by the following case which he had seen with Dr. William Corson, and which Dr. Ellwood Corson was kind enough to report for him. Misled by the first case, Dr. Goodell was not at first disposed to admit the existence of a fecal fistula, but, from the subsequent history of the case, there could be no doubt of it. In this case he believed that a pelvic abscess had burst into the bladder and also into the rectum or small intestines, which had established the communication between the two viscera. Like the first case, as soon as the calculus was removed, the fistulous tract closed and the patient got well. "Mrs. R., American, aged fifty years, the mother of five children. For three or four years prior to November, 1881, she was troubled occasionally by the passage of small calculi, but her health was reasonably good, with the exception of backache and an almost constant pain in the right iliac region. She often expressed her belief that there was something growing in the right side. There was no tumefaction in that region, and her opinion was based on the pain and distress she felt. She never applied to her physician for relief of this suffering. She was also troubled with constipation. In November, 1881, she made a visit to the country and took a long walk. On her return home she had a constant desire to urinate, and she then noticed, for the first time, that her urine had an unnatural color and a very unpleasant odor. The quantity passed was not excessive. This condition continued for five or six days, when there occurred a sudden gush from the bladder of a very offensive mixture of pus and urine, accompanied by great pain and straining. Her pain and distress became so great, and was so augmented by being on her feet, that she was compelled to remain in bed. After the free discharge occurred the pain in the right iliac region ceased, and she has never had any return of it. As she was troubled with constipation, she was directed to eat stewed prunes, and she soon noticed that the prune-skins came from the bladder, as did other articles of food, along with the urine. Every day she was troubled with the escape of gas through the urethra, and this gave her as much pain as the passage of solid matter. She says that she occasionally passed urine through the rectum. She became greatly emaciated, and was but partially relieved of her suffering by the constant use of morphia. Until January 20, 1882, she was under the care of homoeopathic physicians. On that date Dr. William Corson was called to the case. February 10th Dr. William Goodell saw her, and diagnosticated stone in the bladder. February 20th she was etherized and the urethra dilated, and a digital examination proved the existence of a calculus about three fourths of an inch in diameter, attached to the fundus of the bladder. This was removed by Dr. Ellwood Corson. In attempting to dislodge the calculus, it crumbled on slight pressure with the extracting forceps, and proved to be a mass of fecal matter with a calcareous crust but slightly thicker than an egg-shell. While she was under the influence of the anæsthetic, an attempt was made to wash out the bladder, but after injecting $f\frac{3}{4}$ xij of water, and finding that it escaped into the interior of the body and did not remain in the bladder, the washing-out process was discontinued. After she regained partial consciousness and made a strong

straining effort, the injection came away through the urethra. As there were some doubts expressed as to the possibility of there being an opening from the bowels to the bladder, she was induced to eat a few stewed figs, and the seeds were seen to come from the urethra; on another occasion $f\frac{3}{4}$ viij of carmine-colored water was injected into the rectum, and was immediately drawn from the bladder by means of a catheter. After the removal of the calculus it was thought proper to keep the bladder washed out daily with warm injections, and to regulate the bowels with mild aperients; but, after persisting in this course of treatment for four days, it was abandoned, as it caused her great discomfort and did not improve her condition. Afterward she was allowed to eat such food as the system craved, care being taken to select such articles as would not leave an irritating residuum. She rapidly improved, and since April, 1882, has had no trouble with her bladder. If she eats acid fruits, or drinks lemonade, she has some irritation in passing urine. That there was a fistulous opening from the bladder to the rectum there can be no doubt; and when we take into consideration the fact of an abscess forming somewhere in the right iliac region and opening into the bladder, and that the food passed from the bladder in a semi-digested state and the absence of a fecal odor, there is a strong probability that there was also an opening from the small intestines into the bladder."

Dr. J. C. MORRIS had seen two cases of pelvic abscess bursting into the bladder. One case was in the person of a night-nurse at the Episcopal Hospital. A tumor in the lower part of the abdomen first attracted attention. The uterus was drawn up out of reach of the finger when making a vaginal examination; an inflammatory mass could be felt between the uterus and bladder; every half-hour a mixture of urine and pus was voided *per urethram*. If a catheter was passed into the bladder and turned to the right, urine escaped through it, but, if it was passed to the left, nearly pure pus passed through it. Examination with the sound showed a large fibroid in the anterior wall of the uterus. This tumor having undergone purulent degeneration, and a fistulous opening being established into the bladder, the pus escaped through the bladder. A galvanic steppessary five and a half inches long was introduced into the uterus, and was finally successful in effecting its reduction to the normal size. This woman died of fibroid phthisis, and at the post-mortem examination the uterus was found but slightly enlarged, and the fistula into the bladder was not seen, but a communication from the small intestine into the bladder was discovered.

Dr. W. H. PARISH had seen one case of fistulous communication between the bladder, vagina, and small intestine, resulting from an attempted abortion and consequent cellulitis. After long-continued pelvic symptoms, food commenced to pass through the bladder and the anterior and upper portion of the vagina. Water injected into the vagina passed into the bladder, but a sound could not be made to follow it. The food which passed through the fistula was incompletely digested.

PORRO'S OPERATION.—Dr. ELLIOTT RICHARDSON read a report of the post-mortem examination of the body of Lina Earl. This woman was operated upon September 22, 1880, for removal of a living child from the uterus by Cæsarean section as modified by Porro and Müller. A report of the case was published in the "American Journal of the Medical Sciences" for January, 1881. The immediate results of the operation were in every way favorable. The child was living, and the mother made a speedy recovery. She died in New York, on February 24, 1883, two years and five months after the operation. She had been for two years previous to her death at times an invalid, and was under my care occasionally for the treatment of attacks of acute rheumatism, anæmia, etc., to which her life of hardship and

exposure as an exhibiting curiosity rendered her peculiarly liable. The more recent symptoms which appeared during the last illness I did not witness, but learned were attributable to defective action of the kidneys. At the post-mortem examination, made about 9 p. m. on February 24th, ten hours after death, there were present Dr. Satterthwaite and Dr. Hegeman, of New York, and myself.

Inspection of the body showed the long bones of the extremities to be deformed as in rhachitis—deformities which had not been so apparent during life. General anasarca was present. On the surface of the abdomen a cicatrix was observed extending from a point about one inch and a half above the umbilicus to within about three fourths of an inch of the symphysis pubis. The cicatrix was the remains of the abdominal incision made at the time of the operation for her delivery, and occupied the linea alba, directly in the median line, except that at the umbilicus it was deflected to the left. Nearly the whole of that portion of the cicatrix extending between the symphysis pubis and the umbilicus was the site of a large hernia, which, however, did not extend into the latter. This hernia he had seen during the patient's life. It began to appear about six months after the operation, and received no treatment whatever until by its size it became inconvenient; then a bandage or truss was applied, and this she wore constantly until her death. The production and enlargement of the hernia had been greatly favored by the woman's course of life as an exhibitor of herself and child, for the latter she lifted up and held in her arms many times a day in order to display it to her visitors, even after it had become much too heavy for her to carry.

The body was opened by a long incision from the top of the sternum to the symphysis pubis. This incision was deflected to one side opposite the cicatrix of the old abdominal wound, in order that the relations of this to the abdominal contents might be more closely observed. The body, as before stated, was anasarcaous throughout; some clear serous fluid was found in the peritoneal cavity, and a good deal in the cavities of the pleural and the pericardial sac. Dr. Richardson regretted that he had no data of the microscopic appearance of any internal organ or tissue to give. Only the gross lesions which could be detected by the unaided eye in a hasty examination could be given. The heart was not opened, but the left ventricle appeared abnormally large. The lungs were œdematous, and pneumonia of the right side was observed. The spleen was enlarged. The liver presented an appearance of fibrous or "hob-nail" degeneration. The kidneys showed unmistakably the existence of Bright's disease. The abdominal and pelvic cavities gave no evidence of any peritoneal or cellular disease. The hernia was found to be covered by peritonæum and skin, the remaining structure having parted to admit the protrusion of the intestines and peritoneal covering. No adhesions between the cicatrix and subjacent structures could be detected except at the lower angle of the wound. It was at this point that the stump of the uterus had been fixed in a manner similar to the disposal of the pedicle in ovariectomy. A fibrous band was found extending from a depression in the abdominal wall at this point to a body consisting of the remains of the uterus.

Dr. Satterthwaite, who examined these specimens, had written him that this body, which occupied nearly the normal position of the cervix uteri except that it was displaced somewhat anteriorly, presented the following characteristics: "The extreme length of the stump was 4.75 cms. (1.87 inch); vertical thickness 2.5 cms. (1 inch); its breadth 1.5 cms. ($\frac{1}{2}$ inch). On attempting to pass a uterine probe into the os externum, it was found to enter with difficulty, though the cervical canal was capable of admitting a No. 10 (English) sound. The mucous membrane was coated with a deposit of white, thick, gelatinous

material, and was intact for a distance of 3.5 cms. ($1\frac{1}{2}$ inch.) No naked-eye evidences of cicatricial tissue were made out at the amputated extremity of the neck."

Examination of the pelvis *in situ* had been of much interest. Measurement of the superior strait gave for the conjugate diameter 2 inches exactly; transverse diameter, $4\frac{1}{4}$ inches exactly; oblique diameter, $4\frac{3}{8}$ inches exactly. The pelvis was a rachitic one, although the pavilion did not present the wide-spreading alæ or the diverging anterior-superior spinous processes of the ilia which were the usual deformities of rhachitis in this part of the pelvis. The true pelvis, however, presented highly characteristic deformities. The sacrum was at its upper part dislocated and pressed downward and forward into the pelvic cavity, while the lower extremity, being held by ligamentous bands to the ischia and pubic bones, caused a sharp bending forward of the last three vertebræ of the sacrum. This deformity implied abnormal softness and pliability of the bone at a time when the individual was of sufficient age to either stand or sit erect, so that it alone was conclusive evidence of rhachitis having existed. The normal curvature of the pubic bones was nearly lost, so that they receded from the symphysis in nearly straight lines backward and outward to join the ischia and ilia, the two pubic bones, when viewed from above, forming an abnormal angle at the symphysis. The shape of the superior strait was therefore obtusely cordate, deeply indented at its base by the promontory of the sacrum projecting far into it. He was much surprised at the evidences of rhachitis, which became more and more conclusive as the examination proceeded, since the history of the patient formerly given was that of excellent health from birth to the time of the operation in 1880, and it was said by the woman, and those who had known her best in early life, that she was in her figure an almost exact counterpart of her father. These supposed facts had led him to believe that her shape was due to arrested growth and not to rhachitis. It would be of interest to know that the child of this woman was now living, that he was well developed, and presented no deformity or any symptom of rhachitis. He was of fair size for his age.

In closing, he would draw the following conclusions from the examination:

1. That the deformity of the pelvis and extremities was due to rhachitis.
2. That the operation had nothing to do with the patient's death.
3. That the operation caused the patient no inconvenience except from the hernia, which would either not have become developed, or, at most, would have been small, had it not been for the exposure of the woman to unusual strain and her total neglect to resort to any treatment until the hernia became large.
4. That success, in so far as the woman was concerned, would have been possible, and even probable, with diameters so large, if embryotomy had been resorted to in this case; but the operation would still have been dangerous, and the child would necessarily have perished.

Dr. R. P. HARRIS remarked that, of five Porro operations in this country, four have proved fatal. This was the first successful operation in which a post-mortem examination had been obtained after entire recovery.

In reply to Dr. A. H. Smith, Dr. RICHARDSON stated that no trace of a fistulous opening between the stump of the uterus and the abdominal wall existed at the time of death.

SUPPURATING CYST OF THE BROAD LIGAMENT, WHICH HAD PERFORATED THE BLADDER.—Dr. B. F. BAER read the history of the case, and exhibited the specimens removed by laparotomy. The characteristic points were chills, exhaustion, anorexia, tenderness throughout the lower abdomen, and a small, painful tu-

mor in the left iliac region, with great irritability of the bladder. Pulse 120, temperature 100° to 102° F. The tumor extended down between the bladder and uterus, and the latter was retroverted. Douglas's cul-de-sac was occupied by a thin-walled fluctuating cyst, about the size of a large orange. The uterus could be moved slightly from side to side. The anterior tumor rested on the bladder, and was adherent to it. The history showed a slowly growing cyst with purulent contents, commencing about three years before, when the first chills and a mild septicæmic fever had occurred; gradual emaciation had been progressive since that time. Tympanitic resonance of the tumor gave evidence of decomposition, with evolution of gas. When the catheter was passed before operating, several ounces of very fetid pus flowed through it, showing a spontaneous rupture of the cyst into the bladder. The cyst was found adherent to the abdominal wall and to the bladder, but not to the intestines or uterus. The cyst was aspirated and removed by laparotomy. The pedicle, consisting of broad ligament and Fallopian tube, to which the left ovary was adherent, was transfixed and ligated. The cyst in Douglas's pouch arose from the opposite broad ligament; it had formed no adhesions, and was removed without evacuation of its contents. The ovary and Fallopian tube were healthy, and were not removed. The aperture in the bladder through which the contents of the cyst had escaped was valvular, and was closed by the compression furnished by the external dressings. The patient died from exhaustion soon after the close of the operation. Dr. Baer introduced cases from W. L. Atlee, Peaslee, Keith, George F. French, and Goodell, to prove the correctness of the principles upon which he operated.

Dr. W. H. PARSON thought Dr. Baer's rules safe and sound; he had removed a suppurating cyst with anterior adhesions. An experienced operator, who was present, recommended delay; but, feeling sure of the correctness of his own principles, he removed the cyst and the patient recovered. In another case, in which a fistulous opening discharging pus existed, suppurative peritonitis was diagnosed, but, after death from septicæmia, a post-mortem examination revealed a suppurating cyst of the ovary.

W. H. H. GITHENS, M. D., *Secretary.*

Miscellany.

THERAPEUTICAL NOTES.—*The Treatment of Migraine.*—Dr. W. J. Morton ("Medical Gazette," July 21, 1883) believes that the vaso-motor theory of migraine affords the most satisfactory indications for the treatment of the disease. Two forms of the affection are to be distinguished: the first, and by far the more common, that in which there is spasm of the muscular coat of the arteries on the affected side; the second, that in which there is paralysis of the muscular tissue in the arterial walls. The terms introduced by Eib, "angio-spasm" and "angio-paralysis," conveniently describe these conditions. The most satisfactory single remedy for the form of migraine in which there is angio-spasm is the bromide of sodium. Drachm doses are to be given at every onset, and repeated in an hour and a half, if the attack does not cease. This will seldom fail in cutting short an attack. In addition, the same remedy should be given in ten-grain doses three times a day, for a period of from three to six months. The sodium salt does not depress the whole economy to anything like the extent the potassium salt does. Cod-liver oil and iron may be given in conjunction with the sodium bromide. The theoretical objection to the use of an agent believed to lessen the amount of blood in the brain, in a condition in which there is supposed to be anæmia of the affected side, is answered

by the paradoxical assertion that in the spastic form of migraine the bromide probably increases the quantity of blood in the anæmic area by depressing the function of the vaso motor system. Nitro-glycerin and nitrite of amyl, presumably from their power to control spasm, are very useful in the spastic form of migraine. The effects of nitrite of amyl are probably the more transient of the two. Nitro-glycerin is often of remarkable efficacy. A one-per-cent. solution may be given in doses gradually increased from one drop to five drops, three times daily. This agent is believed to be decomposed, in the presence of an alkali, with the production of nitrous acid. This decomposition may take place in the stomach, if it be alkaline; otherwise, and more slowly, in the blood. Nitro-glycerin is best given after the meals. The bromide of sodium may be given with advantage, at the same time, before meals. In the angio-paralytic form of migraine, strychnine is indicated in increasing doses. Ergot in large doses, hypodermically or by the mouth, will often cut the attacks short, as bromide of sodium will attacks of the spastic form. Careful experiments by Lowenfeld go to show that the ascending galvanic current will dilate the arterioles of the brain, while the descending current will contract them. Lowenfeld also found that, by placing the anode on one side of the head and the cathode on the other, the vessels on the side of the anode were dilated, and those on the side of the cathode contracted. To remember, with reference to the currents, that the ascending dilates, and the descending contracts, the following mnemonic initials may be used: A. D., D. C. which may be supposed to stand, also, for Anno Domini, District of Columbia. If the diagnosis is correctly made, this simple aid to the memory will prevent any confusion as to which of the two currents should be used in any given case.

The Treatment of Eczema.—Dr. McCall Anderson ("Journal of Cutaneous and Venereal Diseases," July, 1883") lays down the following principles respecting the local treatment of eczema: Tarry preparations are chiefly of use when the eruption is chronic or declining. They should not, as a rule, be employed when the conditions call for soothing applications. Even in chronic and declining cases they must be applied with care, and properly diluted, or they are liable to aggravate rather than relieve. When expense is to be considered, wood tar (pix liquida), coal tar (which may be called pix mineralis), and Burgundy pitch (pix Burgundica) are applicable. More elegant but more expensive preparations are oleum rusci, a product of white-birch bark, and oleum eadini, obtained by the dry distillation of the wood of the *Juniperus oxycedrus*. These tars and oils may be used as such, or they may be made into ointments, soaps, or lotions. The tars and oils themselves are to be rubbed briskly into the affected parts with a piece of flannel, and allowed to dry upon them. Applications may be made once or twice daily, or oftener, if the irritation relieved by their use recurs oftener. Before renewal, the remains of previous applications are to be well washed off with soft soap, or, if it can be afforded, with some more agreeable form of soap. If the parts are stiff, or if there are fissures, tarry ointments are more appropriate than tar itself. Unguentum picis liquidæ, properly diluted, may be used, or either of the following: R Picis mineralis, 3 j; glycerinæ (Price), 3 iij; adipis benzoati, 3 iss. M. Or, R Olei rusci purificati, 3 iss.; zinci oxidi, olei amygdalæ, adipis benzoati, aa 3 ss.; olei rosæ, ℥ij. M. Sig. Melt a little, and rub firmly into the seat of the eruption two or three times daily. Soaps containing tar or oil of cade are often useful. The cade soap made at Aix-la-Chapelle is one of the best, but it costs about a dollar a cake. Seller's (London) "juniper tar-oil soap," Rieger's (London) "medicinal tar soap," and Wright's (London) "sapo carbonis detergens," are less expensive. These soaps are to be used like common soap, but more firmly rubbed on, or even allowed to dry on. Hebra's preparation, "tinetura saponis viridis cum picæ," is often of great value. It is a mixture of equal parts of common tar, methylated spirit, and green soap. A more elegant lotion may be made by mixing equal parts of oil of cade, rectified spirit, and soft soap, with a little oil of lavender, to cover, in part, the unpleasant odor. Instead of soft soap, potassæ fusa may be used, thus: R Potassæ fusæ, gr. ix, spiritus rectificati, olei rusci, "Eau de Cologne," aa 3 j. M. Sig. Sponge the parts night and morning, and whenever the itching is troublesome. If these lotions are too stimulating, or if they prove objectionable from the temporary

though well-marked discolorations they cause, they may be rendered dilutable by being so modified that they will form an emulsion with water, thus: R Picis mineralis (vel olei cadini), 3 ij; spiritus rectificati, 3 ij. Cola et adde liquoris ammoniæ fort., ℥ viij; glycerinæ (Price), 5 vj; aquam destillatam ad 3 xij. M. Sig. Sponge the parts two or three times daily. Pix liquida may also be rendered miscible in all proportions with water by the addition of *Laminaria saccharina* (sea belt). Carbolic acid is of less value in eczema than the tarry preparations, though it may succeed when the latter fail. The aqueous solution, in which form carbolic acid is generally to be used, is colorless, and its odor, though pronounced, is less disagreeable than that of some of the tars. It removes fetid exhalations, allays itching, and sometimes quickly heals ulcerations and excoriations. The strength of the solution should depend on the chronicity of the disease. Mercury is sometimes of service in eczema, especially when the itching has moderated and the exudation and infiltration have disappeared. Unless there is a syphilitic taint, it is, however, inferior to tarry preparations. Any of the official ointments may be used, or the proportion of mercurials they contain may be increased or diminished according as a more stimulating or less irritating ointment is indicated. Cyanide of potassium, carbolic acid, or camphor may be added if there is itching. A lotion may be made by dissolving bichloride of mercury, one to four grains, in a little alcohol, and adding an ounce of rose or lavender water. Dilute hydrocyanic acid may be combined with this if necessary. Care must be taken in giving any preparation of mercury to avoid salivation. Sulphur, except as it kills parasites, is of doubtful utility. Emollient ointments are best applied spread upon soft cloths; stimulating ointments should usually be melted on the finger-end and rubbed thoroughly into the part. None should remain undissolved on the surface, which should simply appear as though recently moistened. Great care should be exercised to prevent the use of rancid ointments. The application of such tends to aggravate the disease rather than to relieve it. Astringents, though of some use in eczema, are inferior to other remedies.

HOW TO BRING UP INFANTS.—Mr. Edmund Owen, F. R. C. S., of London, gives the following instructions to our patients.

What Food to give.—Mother's milk is the proper food for babies, and until they are three or four months old they should have nothing else. But if that can not be got, or be not sufficient, cow's milk fresh two or three times a day, and from the same cow, and not scalded, is the next best food; but it must be freely diluted, as it is much too "strong." The bottle should be filled with a mixture of cow's milk and warm water, in which a lump of white sugar and a very small pinch of salt have been dissolved. For the first few months there should be more water than milk—perhaps *twice as much water* as milk—and, as the babe thrives, the proportion of milk may be gradually increased. No other food should be given before the sixth month; baked flour, arrowroot, and oatmeal can not be digested, so they cause sickness and diarrhœa.

When to give it.—For the first month a baby should be fed every two hours, and, by gradually increasing the interval, he is in time fed every three, and, eventually, every four hours. He should not be fed because he cries; very likely he is in pain because his stomach is overloaded. When he is sick after his milk he should be fed for a less time and at shorter intervals, and, if the bottle is being used, a larger proportion of water must be tried; and, if he is a fair sleeper, he should be woke up for his regular meals, and, never allowed to over-feed. A tablespoonful of lime-water may be added to each bottleful of food, and especially so in summer.

How to give it.—The best kind of feeding-bottle is the old-fashioned, long, straight one, with a short India-rubber teat and with no tube at all. The very worst kind is that with the long India-rubber tube. There should be two bottles—one for day and one for night; after being used, the bottle should be thoroughly washed in hot water, in which a little soda has been dissolved, and should then be well rinsed in cold water. Till next wanted it should be kept in a basin of clean cold water. When six months old the baby may be allowed, in addition to milk, boiled bread and milk, oatmeal, Robb's biscuits or Chapman's wheat flour.

Weaning.—As a rule, when the baby is about nine months old the mother should begin to wean him by giving him less of the breast or bottle, and more of the cow's milk and of the foods just mentioned, and, in addition, a little beef-tea or meat-broth and soaked bread. At a year old the child must be entirely weaned, and soon he must have daily a little under-cooked meat pounded up into a pulp, and to which a little gravy and salt are added; some potato finely mashed and covered with gravy; an egg; or a little milk-pudding. On no account should he be allowed any wine, beer, tea, or coffee, though he may have cocoa and milk. He should be given his meals regularly, and he should not be allowed to "pick" at bread and butter, cakes, and sweet stuff in the intervals. Children flourish best on fresh foods. The worst nourished patients that I see at the hospital for sick children are those reared on Swiss milk and various patent foods. **Rule.**—Do not give a baby food or physic that is advertised.

Clothing.—Babies and little children must be kept always warm. They can not be "hardened" by scanty clothing or cold baths. Their necks, thighs, legs, and arms need to be covered as well as their chests and bodies; they should wear long sleeves and stockings, and, when old enough, cotton or flannel drawers.

Fresh Air.—Children should be taken out of doors each day that the weather is fine. If they are sent out in a perambulator, care must be taken that the feet and legs are warm to start with, and that they are so well covered throughout the ride that they are warm on the return home. Every day, unless a bitter wind is blowing, or it is foggy, the windows should be opened for a while, for fresh air is as necessary for children as fresh food.

Sleeping.—At night if a child perspires freely or kicks off the bed-clothes, he should wear a flannel bed-gown long enough to be tied below his feet, and the bed-clothes must be securely tucked in. He should not be rocked or patted to make him sleep; sleep should come naturally, and, like the food, at regular intervals.

Bathing.—Morning and night he should be washed all over in warm water, but should not be exposed long enough to feel chilly afterward. A handful of sea-salt, thoroughly dissolved, may be added to the bath. Except in the very warmest weather no little child should be put in a cold bath.

INFANT MORTALITY AND THE "BABY'S BOTTLE."—Dr. R. Dacre Fox, Manchester, writing on the subject of infant mortality, speaks of his experience as an old resident medical officer at the workhouse, and as surgeon to a children's hospital, which has taught him to regard as a very fruitful source of milk-poisoning the decomposition from the vessel which is used to feed the child. He feels sure all of his *confrères* who have to treat the children of the poor will agree with him that ninety-nine per cent. of the bottles out of which children are fed are offensive from the odor of the decomposed milk, which adheres about the cork, tube, or teat through which the children suck; and in the bottle itself rings of adherent putrefying milk mark, as tide lines, how much the child has taken at a meal. He adds: "The use and abuse of the 'baby's bottle' would be a fit subject for inquiry by our local Sanitary Association; and, assisted by its lady members, might it not devote some of its energy to a teaching crusade among the women in the poorer districts of the town?"—*Med. Times and Gazette*.

BATHERS' CRAMP.—Some recent bathing fatalities have again drawn attention to the important subject of bathers' cramp. If the nature and causes of this dangerous affection were more generally known, it is probable that many deaths from drowning in the bathing season might be prevented. Cramp is a painful and tonic muscular spasm. It may occur in any part of the body, but it is especially apt to occur in the lower extremities, and, in its milder forms, it is limited to a single muscle. Pain is severe, and the contracted muscles are hard and exquisitely tender. In a few minutes the spasm and pain cease, leaving a local sensation of fatigue and soreness. When cramp affects only one extremity, no swimmer or bather, endowed with average presence of mind, need drown; but when cramp seizes the whole of the voluntary muscular system, as it probably does in the worst cases, nothing, in the absence of prompt and efficient extraneous assistance, can save the individual from drowning. Although the intimate nature of muscular cramps and the precise mode in which they are estab-

lished are still unknown, experience has furnished us with sufficient data on the subject to enable us to recognize the chief conditions of their causation. These conditions are: a peculiar individual susceptibility or idiosyncrasy; the shock of cold applied to the general surface of the body; prolonged muscular exertion; and forcible and sudden muscular exertion, especially in the direction of the extension of the extremities. There can be no doubt about a liability to muscular cramp being an individual peculiarity. The disorder is especially apt to arise in persons of irritable temperament. While cramp has been met with in all ages, sexes, temperaments, and climates, it has been observed that it occurs far more frequently in warm climates than in cold, and chiefly in the hottest of warm climates, and that persons of middle age suffer most from the affection, and men more so than women, and the robust and vigorous more so than the weakly. Neither can there be any doubt that the shock of cold applied to the surface of the body, especially when the body is unduly heated, is the commonest determining cause of the worst and most extensive forms of bathers' cramp. On this fact is founded the common prejudice against bathing when the body is much heated. Many fatal cases have illustrated this point. Only a short time ago a robust soldier, who was an expert swimmer, rowed in a boat, upon a sultry evening, to a deep pool; here, with his body glowing from muscular exertion, he plunged into the water with the intention of taking a refreshing bath, when he was immediately seized with general muscular cramp, so that the poor fellow was at once drowned. That mere prolongation of muscular exertion, as in continued swimming, and forcible and sudden muscular exertion, particularly in the extension of the extremities, as in swimming with very vigorous and rapid strokes, are, respectively, efficient and frequent determining causes of cramp, is a familiar experience to every swimmer. These muscular conditions, however, usually give rise only to the slighter and more localized forms of cramp. Serious cramp is a peril which menaces most persons with highly developed muscles. Its most powerful and most avoidable cause is the sudden immersion of the body, when its surface is highly heated, in water of a relatively low temperature.—*Brit. Med. Journal*.

THE USE OF THYMOL AND CORROSIVE SUBLIMATE IN EMBALMING.—The "*Lancet*" has received a short paper from Dr. J. Polak, of Warsaw, who, during the past winter, has been engaged in making experiments in the anatomical school upon the best methods of preserving bodies. An injection of a solution of thymol in glycerin and water was advocated by Virodsz in 1876, and it was with the view of comparing this method with that adopted by Chaussier—viz., the use of corrosive sublimate—that Dr. Polak instituted his research. He found that thymol, like sublimate, when used in a sufficiently concentrated form, arrested decomposition of the whole body by simple injection of the fluid through the carotid or femoral artery, the corresponding vein being opened. But he also found that even an advanced state of decomposition of the limbs was arrested, and the signs of such decomposition disappeared under the use of injections of sublimate, especially if only spirit and glycerin and no water were used. The skin became mummified and of a dark-brown color, and the muscles acquired the appearance of smoked ham under either method, and neither heat nor damp had any deteriorating effect. But a much smaller quantity of the sublimate injection than of the thymol was needed to produce these results. Moreover, the color of the skin was longer preserved, and the comparative cheapness of sublimate renders it, perhaps, preferable. Dr. Polak points out that the injecting syringes should be of glass, owing to the action of sublimate on copper. For ordinary anatomical purposes an aqueous solution—1 in 300 or 1 in 500—is amply sufficient, and is better than chloride of zinc.

CONSTIPATION IN INFANTS.—In the "*Lancet*," Dr. M. C. Hatton recommends the following treatment:

Take one quart of bran meal, tie it up in a pudding-bag so tight as to get a firm, solid mass, put it into a pot of water early in the morning, and let it boil till bedtime; then take it out and let it dry. In the morning peel off from the surface and throw away the thin rind of dough, and with a nutmeg-grater grate down the dry hard mass into a powder. Of this from one to three teaspoonfuls may be used by, first,

rubbing it into a paste with a little milk, then adding it to about a pint of milk, and finally bringing the whole to just the boiling point. It must be given through a nursing-bottle.

THE INFLUENCE OF SOCIAL POSITION ON THE DEATH-RATE.—Since the commencement of the present year the Registrar-General for Ireland has included in his weekly return a table showing, in five general classes and eighteen groups, the occupations or social position of the persons whose deaths are registered week by week in the Dublin Registration District, the annual death-rate represented by the deaths registered, the number of deaths at each of six periods of life, and the number from each of the principal causes of death. This table has already supplied some suggestive and instructive information. Thus, the second quarterly return for 1883 shows that in the thirteen weeks ending June 30, 1883, the number of deaths registered in the Dublin Registration District (the total area of which is 24,710 statute acres, and the population of which, estimated to the middle of this year, is 349,685) amounted to 2,674—1,294 males and 1,380 females—affording an annual ratio of 1 in 52.7, or 30.6 in every 1,000 of the estimated population. The deaths in families of the "professional and independent class" were equal to an annual rate of 24.3 per 1,000 of the persons in that class; in the "middle class" the death rate was 26.8 per 1,000; among the "artisan class and petty shopkeepers" it was 23.6; and in the "general service class" and the "inmates of workhouses" combined it was 38.6. Among the last division—"inmates of workhouses"—taken separately, the rate was as high as 43.6 per 1,000 per annum; whereas among the subdivision of the professional and independent class entitled "persons of rank and property, not otherwise described" (numbering 19,030), the death-rate was only 18.5.—*Med. Times and Gazette*.

NOTCHED TEETH.—In a paper read at the Société de Chirurgie of Paris, M. Magitôt, says the "*British Medical Journal*," lately called attention to the notching and erosions of the teeth in inherited syphilis, and on the relations of this disease to rickets. He thinks that the notch is not characteristic, and states that it is never found in some races frequently affected by syphilis, such as the Japanese and Peruvians. According to Magitôt, not only inherited syphilis, but also all other serious troubles of nutrition, may cause diminution in the number and size of the teeth, or delay in the period of their eruption, but never erosion. Most frequently, the latter is caused by certain nervous affections of early childhood, such as infantile convulsions, especially when accompanied by general debility.

ARMY INTELLIGENCE.—*Official List of Changes of Officers serving in the Medical Department of the United States Army from July 28, 1883, to August 4, 1883.*—TERRILL, H. S., Major and Assistant Surgeon. Granted leave of absence for one month, to commence September 1, 1883. S. O. 77, Department of the Piate, July 26, 1883.

NAVAL INTELLIGENCE.—*Official List of Changes in the Medical Corps of the Navy during the week ending August 4, 1883.*—Surgeon J. W. Coles ordered to the Naval Hospital, Philadelphia, Pa. — Passed Assistant Surgeon E. H. Marsteller, detached from the United States steamship Hartford, and granted sick-leave. — Passed Assistant Surgeon J. F. Bramford, detached from the Naval Academy, and ordered to the Hartford. — Medical Inspector E. S. Bogert and Passed Assistant Surgeon N. McP. Ferebee, detached from the Navy Yard, Norfolk, Va., on August 30th, and ordered to the United States steamship Trenton, September 1st. — Passed Assistant Surgeon J. D. Gatewood, ordered to the United States steamship Trenton, September 1st. — Surgeon B. H. Kidder, detached from the Naval Station, Port Royal, S. C., and ordered to the Navy Yard, Norfolk, August 30th.

SOCIETY MEETINGS FOR THE COMING WEEK.—*Tuesday, August 14th:* Medical Society of the County of Rensselaer, N. Y.; Newark (N. J.) Medical Association (private); Jersey City Pathological Society (private); Trenton (N. J.) Medical Association (private). *Wednesday, August 15th:* Lehigh Valley Medical Association (Easton, Pa.—annual); New Jersey Academy of Medicine (Newark).

Original Communications.

INTESTINAL PERISTALSIS.

By ISAAC OTT, M. D.,
EASTON, PA.

It is known by recent observers that Nothnagel* has discovered that when the intestinal canal of a rabbit is bared, under salt solution, the application of a crystal of chloride of sodium is followed by a contraction of the intestinal canal. This wave of contraction always runs toward the pylorus. Some years ago I discovered† that the optic thalami, when electrically irritated, arrested the peristalsis of the intestinal movement. Since that period I have also found that the heads of the crura cerebri‡ participate in this inhibition. These inhibitory centers not only act on the intestinal reflexes, but all the spinal motor and sensory reflexes, as I have elsewhere shown. These inhibitory centers also, by their decussating fibers, have a crossed activity. It occurred to me that the effect of the irritation of sodium salts on the bowel would be another excellent means of determining the effect of the irritation of the thalami and crura on the intestinal canal.

With this end in view, I have made several experiments according to the following method: A bath of zinc, thirty-two inches in length, in breadth nine inches and a half, and in depth eight inches and a half, was used. This was filled to a sufficient height to immerse the abdomen of the animal, the liquid being a half-per-cent. salt solution, kept at a temperature of 37–38° C. Under this solution the rabbit, previously etherized and bound down, had his abdomen opened. Then a salt-crystal was applied to different parts of the small intestine, and the reaction noted. Then the brain was bared with the bone-forceps, and needles, insulated by means of sealing-wax, were thrust into the optic thalami. They were attached to the secondary spiral of a Du Bois-Reymond induction apparatus. The vagi were previously divided in some of the experiments, so as to avoid any exciting influences being transmitted in that direction to the intestine. It was found that baring the brain usually inhibited the reaction for some minutes, probably due to the sensory irritation calling into activity the centers of inhibition. In fact, this procedure annihilated the reaction more fully than faradaic irritation did. When a strong faradaic current was passed through the needles, the reaction was usually greatly weakened. In some cases the diminution was very slight, probably due to a spreading of the current to centers exciting peristalsis. These facts explain the obstinate constipation met with in certain diseases of the brain, the difficulty being an inhibition of their movements. The relaxation of the bowels met with in certain unconscious states of exhausting fevers is due to a paralysis of the inhibition-centers, allowing the intestino-motor ganglia to as-

sume unwonted activity. In the same manner, in children, where inhibitory centers are not fully developed, we have a similar tendency to exaggerated intestinal movement.

As the physiology of several organs has been elucidated to a certain extent by the action of drugs, I have endeavored to ascertain their effect on intestinal movement. Nothnagel has already shown that morphine, in small doses, arrests the salt-reaction, and in large doses allows it to act normally, or rather in an exaggerated degree. I have confirmed this statement. The drug I first used was atropine. In doses of a milligramme subcutaneously, the salt-reaction failed, but, in doses of three centigrammes or more, the reaction was very marked. Severance of the tissues going to a loop of the intestine allowed the loop to react feebly.

The action of atropine was studied in another manner; the animal was killed and a bifurcated cannula bound in the thoracic aorta, and the portal vein opened. Then a mixture of dried blood and salt solution was rubbed together, strained and heated to the temperature of the body and run through the intestinal wall, and the reaction noted. Then another flask filled with blood and heated to the temperature of the body was added; atropine with this solution was transfused. It was found then that the salt-reaction failed. If, now, nicotine was added to the solution, the reaction to salt returned.

The effect of muscarine was next studied. In small doses, $\frac{1}{30}$ gtt. subcutaneously, it did not prevent the salt-reaction, but always increased it. If now a milligramme of atropine was given to a rabbit which had received $\frac{1}{10}$ gtt. of Merck's sulphate of muscarine, the reaction failed. If to a rabbit a milligramme of atropine is given, and, the salt-reaction fails, then a drop of muscarine subcutaneously restores it. When the salt-reaction is lost by atropine, nicotine always restores it. I also studied the effect of eserine salicylate in small doses. When I used .0002 gr. eserine subcutaneously, the salt-crystal caused a wave of contraction in both directions. The injection, subcutaneously, of one milligramme of atropine caused reaction to take place in only one direction.

When a small dose of morphine is injected, the salt-reaction fails. Then, if .03 gr. atropine is given, the result is not changed. Or, if .035 gr. of morphine is given, and the bowel reacts to the salt-crystal, and then a milligramme of atropine is given, the salt-reaction still takes place. If, however, the salt-reaction fails by the use of .01 gr. of morphine, the action of .0005 gr. eserine will restore it.

That there are ganglia which excite intestinal peristalsis, I think no one will deny. That Pflüger and numerous other observers have shown that irritation of the splanchnics arrests the movements of the bowels is another opinion which is axiomatic. That this arrest is wholly due to ganglia in the bowel inhibiting the peristalsis excited by the motor ganglia, can not be denied, as Houtkeest has shown that the inhibition occurs when no vaso-motor changes can be seen to take place. Having now intestino-inhibitory and intestino-motor ganglia in the intestine, the question arises, Does the action of drugs sustain this theory in a physiological sense?

* "Centralblatt f. d. med. Wissenschaften," 1882, No. 37.

† "Journal of Nervous and Mental Disease," Oct., 1879.

‡ "Journal of Physiology."

Now, morphine has been shown by Gscheidlen,* and atropine by Rossbach,† to excite the cardio-inhibitory apparatus, and larger doses to paralyze it. Now, I have shown that both morphine and atropine in small doses arrest the peristalsis as regards the salt-reaction. Also that larger doses restore it. This similarity of action of the drugs on the cardio-inhibitory apparatus and on the intestino-inhibitory tends strongly to prove two things: first, that there is an intestino-inhibitory apparatus; second, that morphine and atropine primarily stimulate it, and in larger doses paralyze it. That atropine and morphine have a central action is shown by experiments where the nerves going to a segment of the intestine are divided and the segment responds to the salt-crystal. That atropine also has a peripheral action on the intestino-inhibitory ganglia is proved by experiments where I have transfused blood-mixtures containing atropine and prevented the salt-reaction. That the intestine was not dead was proved by the use of nicotine, when the reaction returned. It is quite evident that the intestino-inhibitory apparatus requires much larger doses of atropine to paralyze it than the cardio-inhibitory does. Nicotine, eserine, and muscarine are able to overcome the intestino-inhibitory irritation of atropine in some manner. As regards eserine, Rossbach has shown that physostigmus simultaneously causes a strong irritation of the cardio-inhibitory and cardio-motor ganglia, and that in their contest sometimes one set of ganglia, and at other times the other set of ganglia, obtain the supremacy. In the small doses that we used the intestino-motor ganglia always obtained the control and overcame the stimulation of atropine on the intestino-inhibitory apparatus. With nicotine, Truhart and Schmiedeberg have shown that it also is a cardio-motor excitant. In the dose used by me, it was a stimulant of the intestino-motor ganglia.

Schmiedeberg‡ and Koppe have demonstrated that, while muscarine is a stimulant to the cardio-inhibitory apparatus, it is also a cardio-motor stimulant. In the doses used by me of Merck's muscarine it was an intestino-motor excitant. In experiments where eserine was first given it was found that atropine could only partially overcome the excessive action of eserine, for, when the salt caused a wave in both directions from it, atropine restrained the wave in one direction. Muscarine also overcomes atropine. It was quite evident that the relation between the cardio-inhibitory and the cardio-motor ganglia on the one hand was somewhat different from the relation between the intestino-inhibitory and the intestino-motor on the other hand. The inhibitory ganglia of the intestines have less control over the intestino-motor ganglia than the cardio-inhibitory have over the cardio-motor. It is also evident that the action of drugs on the intestinal canal will throw light on the rôle of the cardio-motor ganglia, just as the action of drugs on the heart illuminates their action on the intestinal canal. From these experiments it follows: 1. That in the optic thalami and crura cerebri are inhibitory centers restraining the intestinal reflexes. 2. That drugs may be divided into intestino-

inhibitory and intestino-motor. 3. That morphine and atropine in small doses are intestino-inhibitory agents. 4. That eserine, nicotine, and muscarine are intestino-motors.

BRAIN IRRITATION.

EXPERIMENT I.—Rabbit etherized, abdomen opened, electrodes inserted into base of brain. The intestine previously responded, but, after faradaic irritation, the bowel acted less rapidly and extensively.

EXPERIMENT II.—Rabbit etherized, skull opened, corpora quadrigemina laid bare, needle electrodes inserted at the union of the crura and optic thalami; faradaic irritation. Then salt-crystal had hardly any effect on peristalsis.

EXPERIMENT III.—Rabbit etherized, skull opened, vagi divided, corpora quadrigemina bared, abdomen opened; intestine reacted to salt-crystal; needle electrodes were inserted into head of crura, and an induction current passed. Salt-crystal acted very feebly.

EXPERIMENT IV.—Rabbit etherized, vagi divided, brain bared, abdomen opened, but intestines did not act for about five minutes; needle electrodes inserted into thalami and crura. The reaction to salt was more feeble.

EXPERIMENT V.—Rabbit etherized, intestines exposed, skull perforated over the thalami and needles thrust into them, and the salt reaction failed for some time. After a while it returned, and a weak faradaic current was passed through the base of the thalami, and then the salt-reaction was enfeebled.

ATROPINE.

EXPERIMENT VI.—Rabbit etherized by subcutaneous injection of ether; abdomen opened under salt-solution; salt-crystal caused active movement. A milligramme of atropine was given subcutaneously, and in ten minutes the salt-crystal did not cause any action. Then a drop of muscarine sulphate was injected subcutaneously, and in about ten minutes the intestine responded normally to the salt.

EXPERIMENT VII.—Rabbit etherized; received .01 gramme atropine subcutaneously; the intestine, which previously responded to the salt, did not act. Then a loop of the intestine was ligated, the vessels going to the loop were broken up, and then the salt-crystal was followed by a movement.

EXPERIMENT VIII.—Rabbit etherized, intestine exposed; salt-crystal caused peristalsis; .02 gramme atropine subcutaneously; salt caused more action; .014 gramme atropine subcutaneously, when the intestine responded to salt-crystal.

EXPERIMENT IX.—Rabbit received stab in medulla; chest opened, cannula inserted into thoracic aorta, blood-mixture and salt-solution run in under 100 mm. (mercury) pressure; the peristalsis was active. Then ten drops of atropine solution were added to half a pint of blood and salt solution and run into the thoracic aorta. The intestine soon failed to respond to the salt. Afterward one drop of nicotine was added to a half-pint of blood, and the intestine commenced to move quite actively. The rabbit's abdomen was immersed in salt solution.

EXPERIMENT X.—Rabbit killed; cannula inserted into thoracic aorta; blood-mixture well agitated and run in under 100 mm. pressure; intestine responded to salt-crystal. Then .0025 gramme atropine added to a pint of blood. After a few minutes, intestine did not respond to salt. A drop of nicotine was added to half a pint of blood and transfused, when the small intestine set up active movements. The rabbit's abdomen was immersed in salt solution, at 38° C.

EXPERIMENT XI.—Small rabbit etherized; received .0005 gramme atropine subcutaneously; in about half an hour the salt-crystal had no effect. Before the want of reaction came on the

* "Untersuch. aus dem physiolog. Laboratorium in Würzburg," drittes Heft.

† "Pharmakologische Untersuchungen," Heft 1.

‡ "Das Muscarin," Leipzig, 1869.

latent period was increased, and the extent of the contraction along length of the intestine was slight.

EXPERIMENT XII.—Small rabbit etherized; bowel reacted; .0005 gramme atropine given subcutaneously. After about half an hour the bowel did not react. Then the blood-vessels and veins going to a segment of the bowel were ligated very tightly. After some time the segment of intestine reacted to salt-crystal, while the remaining part of the bowel did not.

EXPERIMENT XIII.—Rabbit etherized; peristalsis active to salt-crystal; .001 gramme atropine given subcutaneously. After about half an hour the salt acted very feebly. Then part of the intestine and vessels were ligated. Salt acted quite well upon the isolated section.

ATROPINE AND MUSCARINE.

EXPERIMENT XIV.—Rabbit etherized, then a milligramme of atropine given subcutaneously. In ten minutes the salt-crystal was without effect. A drop of muscarine sulphate was given subcutaneously. In ten minutes the intestine responded as it did before.

EXPERIMENT XV.—Rabbit etherized; .02 gramme atropine subcutaneously. After considerable time the salt did not act. Then 1 gtt. of muscarine was given subcutaneously. After a long time the intestines seemed to act.

MUSCARINE AND ATROPINE.

EXPERIMENT XVI.—Rabbit etherized; received at 1.50 P. M. $\frac{1}{8}$ gtt. of muscarine sulphate; 2 P. M., intestine reacted normally; received $\frac{2}{8}$ gtt. muscarine; 2.10 P. M., intestine reacted quite readily. Then .001 gramme atropine subcutaneously; 2.25 P. M., no reaction to salt-crystal; 2.25 P. M., 1 gt. muscarine sulphate subcutaneously; 2.45 P. M., intestine slowly reacted to salt.

ESERINE AND ATROPINE.

EXPERIMENT XVII.—Rabbit etherized; received by jugular .0003 gramme of salicylate of eserine; peristalsis was much more active when salt was applied. The wave of contraction ran in both directions.

EXPERIMENT XVIII.—Rabbit etherized; received subcutaneously .0002 gramme eserine at 4.20 P. M. At 4.28 P. M., when salt was applied, the wave of contraction ran in both directions; .001 gramme atropine subcutaneously; 4.40 P. M., reacted in only one direction and slowly to salt; .001 gramme atropine subcutaneously; 5 P. M., reacted, as before, in one direction only.

MORPHINE.

EXPERIMENT XIX.—Rabbit etherized; .02 gramme of morphine sulphate given subcutaneously. In about twenty minutes the intestine did not respond to salt; then .03 gramme atropine was given, but no action by the salt. Then 1 gtt. of muscarine sulphate given; still no response.

MORPHINE AND ATROPINE.

EXPERIMENT XX.—Rabbit etherized; received .035 gramme morphine sulphate subcutaneously. In twenty minutes the salt-reaction was marked; .002 gramme atropine given subcutaneously. The salt-reaction was still present twenty minutes after the dose of atropine.

MORPHINE AND ESERINE.

EXPERIMENT XXI.—Rabbit etherized; received at 12.45 P. M. .01 gramme morphine sulphate subcutaneously. At 1.05 P. M. there was no salt-reaction. At 1.05 P. M. .0005 gramme eserine was given subcutaneously; 1.12 P. M., there was marked reaction to salt-crystal.

ON CAUSES OF MELANCHOLIA.*

By GEORGE BAYLES, M. D.,

ORANGE, N. J.

For the scientific observer of the present day, human pathology has a field which is bounded by no visible horizon.

One step forward enlarges his working area, but does not limit the apparent extent of his unexplored surroundings. This truth is borne in upon the mind at every turn, but never with such vivid clearness as when searching for light in the department of the neuroses.

New visions, cross-lights, and spectra come crowding in under every impulse of serious study, and they must be comprehended, or at least noted, ere they are gone beyond immediate recovery. What is known in medical science beyond the possibility of an error is doubtless of the least value and practical importance as compared with what has yet to be known, and which shall be known.

What stimulus and encouragement for the scientific student!

A little reflection will show how this prediction bears upon that large class of diseases which we have been inclined to think have not yielded very profitable results to investigation, the study of which has not been quite satisfactory. Diseases about which we think there is little more to learn have served for pioneer study in the days gone by, and have come to be regarded as having an unvarying history unless complicated by some intrusive accident.

Cause, advent, course, and treatment are all as precisely noted and as conventionally formulated as the terms of a problem in elementary mathematics. All this is sufficient for our needs concerning this primordial class of familiar idiopathic affections, but will not apply to the mystic department of neurotics. Fixity, conventionality, and formulation will not lend transparency and aids to comprehension to the department of neurotics. Here we confront a variable ætiology, an often disguised advent, a problematical course, and a tentative treatment. The element of uncertainty is the prevailing one, and, for a time, facts must stand, in a measure, undemonstrated, until tests for error have completed their mission. The erratic character of the neuroses shows conclusively to what peculiar order of the functions of life the expressions of disease in organic life owe their origin. Causes which give normal or abnormal impulses to the source and centers of nerve energy are as variable and as numerous as the events of life in the world; hence, the erratic nature of neurotic manifestations is due to variability of causes on the one hand, and, on the other, to peculiarity of the subject under the influence of the causes of neural excitation and disturbance. There are probably few, if any, of our number who have not been interested in states of mental depression from, perhaps, every standpoint that could engage the attention and sympathy of the kinsman, friend, neighbor, and physician. This common experience has afforded us a substantial acquaintance

* Read before the Medical Society of the State of New Jersey, at its annual meeting, held at Atlantic City, June 12 and 13, 1883.

with many forms of mild mental disorder, as well as some that possess the graver characteristics. This acquaintance will assume the dignity of *knowledge*, by and by, when study progresses and nature and science unfold. If we are to begin at the beginning, our present interest will center in the ætiology of these deviations from mental integrity and normal order. Causes that predispose to mental disquietude are often obscure and not readily discernible. This, I believe, is true of all remotely predisposing causes. With regard to causes that date back of those that are immediately exciting we have a field open to honest research, with promise of great reward. At this point we will be at work upon the very foundation of our subject and the point chosen for the few practical thoughts offered, I trust with modesty, in this paper.

The *earliest causes* will be a rare field for speculation, but it will be also a field that will yield good fruit for patient and honest toil.

The timeliness of a study of the more remote causes of mental depression will not be questioned when we consider the alarming prevalence of melancholic mania under the benign circumstances of national peace, general plenty and prosperity, and the wide-spread communal comfort which we now enjoy, when we reflect also upon the fact that this great wave of mental perturbation can not have received its impulse from any unusually distressing social or political excitements.

Spared the horrors of war, pestilence, famine, and exceptional financial distress (each of which is an affliction pregnant with personal woe and sorrow sufficient to dethrone the sound reason of many, even of the strongest), the great cosmic causes—so to speak—of mental discomfiture are not in general operation. We, therefore, must look elsewhere for some besetting or abiding cause of so wide-spread and grievous a visitation of mental disturbances as we now observe. The mental states under review for their ætiological incitements range through mild hypochondriasis, limited melancholia with torpor or with destructive tendencies, or melancholia with persistent excitement of the will. Other states of mental disorder may be included, however, in the list of such as are liable primarily to be induced by the same remotely predisposing causes. All states of mental irritation or depression are liable to be ushered in by the same specific though distantly remote cause. This cause may give rise to only slight functional errors of reason and will-power such as fringe the borders of positive insanity, but the limit of the basis will not invalidate the theory, because what consequentially results of more serious character are only later stages or developments of the same perverted conditions. Abnormal action of the mental organism tending to melancholia exhibits a malady of the mind that explodes into violent and destructive agitation or lapses into lunacy long before it may with reason be suspected that the border-line of insanity has been reached, much less has been crossed.

Mental states such as are clearly morbid and progressive toward the point of positive derangement concern us much as to their ætiology, for the reason that so much depends upon efficient prophylaxis, and so much less upon the means of cure at our command.

Age, sex, and social condition afford our statistics no essential variation in the allotment of this deviation from standard or normal mental health among mankind during periods of social, political, and religious tranquillity. We learn to look to individuals for physical conditions affording evidences of a law of differentiation as to kinds and gravity of all the disorders classed under the head of mental depressions, and this same direction of observation will be the most promising for some law of prevalence. This suggestion seems to point to a fact of special significance, and is an aid, by their simplification, to our studies in this department of mental maladies.

We will not excite contradiction by the broad statement that the condition of the body influences the condition of the mind quite as uniformly as the condition of the mind influences that of the body. Action and reaction between associated mind and matter has never, we suppose, been seriously denied or doubted. That a healthful mind will always be the most wholesome aid to correct bodily functions we suppose to be quite established. There are certain forms of depravity of the body that must affect the mind, and, *per contra*, there are certain forms of mental alienation that have a very powerful effect upon the body. Physiologically, or pathologically, as the case may be, these mutual interests of mind and matter, as between mind and the corporeal body, are ever present and of the greatest importance. There is a certain mutual dependence which is constant and often conservative, and there are certain dependencies which may, without prejudice to either, be dissolved. These we will not attempt to define upon any extended scale. The dependence, however, which we consider as constant is that which we apprehend will furnish us with our clew to the early, perhaps the earliest, remotely predisposing cause of melancholia. *The correct working of the mental forces, we believe, depends primarily upon perfect cerebral nutrition.* It is upon this thesis that we base all that follows in this dissertation.

By freeing our minds, for the time being, of all impressions suggested by the secondary or immediately exciting causes of melancholia, we will be left untrammelled to pursue our researches for those states which lead up to the point of readiness or preparation for the potent action of the secondary influences. Minds with an armor of invulnerability to secondary assaults, through any channel by which the assailing powers may approach, show conclusively that the first source of weakness, or rather the first for weakening, has been equally impotent and ineffectual. An efficient first cause is all that is necessary for the successful operation of the later or secondary causes.

The earliest point at which our thoughts can advantageously start are the pre-natal conditions of life with reference to brain nutrition. Without any superstition relating to maternal impressions, we are convinced that whatever weakens a mother's brain-power will weaken that of her child, during the formative period of its cerebral organs *in utero*. Often, indeed, a feeble-minded child will issue from a strong or healthy-minded woman, or the exact opposite may occur, and these may be exceptionally singular cases. The operation of debilitating causes of brain-power in these cases has

been unequal. Physiological law, therefore, incidentally and occasionally reverses the pathological law. In the vast majority of cases, however, the more malign law holds good, and no benevolent law steps in with force enough to protect against mal-influences.

The contents of the gravid uterus had a period in the history of their development when their atomic entity was an essential derivation from maternal elements, and doubtless (as in the period of differentiation of sex) it is then that the maternal stamp of mental power or weakness, and all its eccentric combinations, is placed upon the germ of human life. This atomic entity which we term the *ovum* is then liable to changes such as fructification or impregnation, implantation in the cavity of the uterus, and all that follows in course of gestation. The least change which may occur may be its simple migration outward unimpregnated, and its exit with the catamenial flux. This change, ending its physiological history, calls for no consideration.

The changes in the course of development, however, are of the first importance. Impregnation doubtless stamps a character of some sort. It may re-enforce previous tendencies that have been derived from maternal sources, or it may obliterate previous tendencies, and it may introduce tendencies of an entirely new nature, such as may result from combining initial tendencies received from both parents. What dire combination of ante-natal circumstances served to furnish the world with a Nero, a Borgia, or a Guiteau it would be interesting to know. Apparently they were born as free of moral corruption as many people who never did a grossly evil thing. In natures capable of as deep defilement as belonged, in later life, to these human demons, the seeds of villainy must have been implanted deep in the subsoil of their natures, awaiting the time of natural development, or the touch of the right passion to ignite this magazine of hellish fires. The seed can not change its nature any more than the leopard can change its spots. The fiat of original tendency has gone forth when the ovum is elaborated and dislodged from its nidus. It is subject to changes if it should meet potent influences, but if the influences are insufficient, or practically negative in the direction of improvement, its original condition will always prevail. This vein of thought in the region of embryology is, perhaps, highly speculative, but we think it not unreasonable, and not discordant with our present light on these subjects. In the case of the mother there is a certain health which is organic health, and may be compared with a normal vegetative vitality. In this, the ovum, and, later on, the fœtus, may participate. It is almost certain that they will. Besides this, there is a health that is something above mere physical integrity. It is described by terms, which, though, meaning much the same thing, have, perhaps, slight differences of verbal significance—endurance, buoyancy, “staying power,” resilience—in a word, something that furnishes a hold upon life superior to what is common, or which is necessarily a part of simple organic life and physiological correctness. When this exists, it will be of equal advantage to the fœtal life and to parental life. The absence of this higher order of health is sure to deprive the egg, and the fœtal product of the egg, of just that special quality of health that would lift

it above the gross animal issue of mere organic health. It is common nature in the one case, while it is sublimated nature in the other. Do you doubt this distinction in your comparisons of the results in life of the influences of offspring from the low, vulgar classes of the world, and of the refined, moral, intelligent, and cultured? Do you begin precisely upon the same basis with each to divine the results of certain fixed agencies, and do you have the same rate of progress with each and all in the general scheme of education and submission to just and human laws? We think we are not far from the truth when we say that a good life or a bad life, so far as its initial bias is concerned, begins within the *corpus luteum*. This maternal influence or diathesis has, then, at this point, independently of all other influences, a feature resembling psychical foreordination. If it were not so, we fear our State might well lose hope and encouragement in what it undertakes for the moral and mental benefit of the masses, and our domestic system would not find advantage, safety, and comfort in the order and excellence of the true family relations. We may easily dismiss all this theorizing without impairing our line of reasoning; yet, if this very primitive point is not deemed fallacious, it greatly strengthens our argument and the logic of the histological events under review. The better the soil nurturing the seed, the better will be the fruit of the seed. The analogy is perfect, we suppose, throughout nature. How much the fructifying agent may occasionally impair the original value of the seed and pervert its tendencies is not yet known. That it may do so in some instances there probably is some evidence to prove, but not, however, such strong evidence as bears upon the fact that an originally bad or imperfect seed can be very greatly improved by the fructifying process. In general, the seed will develop, in due order of physiological action, after the fructifying event, but the primal stamp has probably not been greatly changed for the better, though it may have been changed for the worse. This tendency toward retrograde action is that which we must strive to arrest and reverse, if we wish mankind to emerge from much of its innate or inborn moral and intellectual depravity. The lesson of all this is the unqualified necessity of the pre-natal excellence of the germ of future life, and, more than that, the necessity for the goodness or excellence of that germ before fecundation, as fecundation can do but little, if, indeed, it can do anything, in altering the bias already implanted in the secret nature of the living germ. Now, the nature of the mother, by her instinctive state and her education, establishes, first, by a powerful factor, the future brain-status of her offspring. All that follows of the nature of guiding influences is auxiliary in the right or the wrong direction, according to the original tendency, and is powerful or feeble to modify and alter original conditions, according to the amount of original susceptibility. “Like begets like,” therefore we look to the mother for a solution of what sooner or later shall befall the offspring. How to arrange the life and surroundings of the mother with reference to the welfare of her offspring belongs to the higher departments of hygiene, and opens a field for study and practice with which we may candidly say we are little familiar. This department will be brought into

great prominence as time goes on and we become better acquainted with antecedent influences.

We are keenly alive to cause and effect, and we shall inevitably drift into this interesting branch of observation at a time not very remote. Our social organization is our best field of enterprise. With reference to the moral and physical welfare of children yet to be born, not less than for those already in the world, purity of life, sturdiness of character, refinement, tenderness of all environing influences, high aim, relief from drudgery, tasteful situations, religious principle as against impurity, carelessness, vulgarity, roughness, and cruelty, low purposes, slavish toil, distasteful adaptations, absence of religious motive, and sensitiveness, are the telling elements that determine the nature of offspring. As in the physical, so of the moral nature are these conditions most positive in their effects. In all such cases these conditions are necessarily combined, and the most erratic results are inevitable. If they which are good exert their influence upon the germ of a forthcoming new life, well and good. If they that are evil do likewise, what enormous evil! If these conditions are mixed, what strange perversions of nature result! That they are most generally of a mixed order we may well believe when viewing the anomalies of human life and character.

How far we will go with Dr. Ball depends upon our individual experiences. In a recent interesting lecture on "The Frontiers of Madness," delivered by Dr. Ball in his course at the Paris Faculty of Medicine, he says: "The generally received opinion that folly and reason are separated by a strictly drawn mathematical line is quite erroneous. There is a broad frontier between sanity and insanity, which is peopled by millions of inhabitants." He holds that the number of persons perfectly reasonable on all points throughout the entire period of their existence form but a minority of mankind. The world abounds with people, he tells us, whom a strict scientific diagnosis would condemn as mad, or more or less "touched." Yet at no time of their life would it be permissible to put them under restraint. "Such persons are to be seen occupying honorably and successfully every position in life and society; we brush against them when we take our daily walks abroad; we see them in the mirror which reflects ourselves."

Most certainly it is a mal-nutrition or innutrition that must be regarded as the *causa primaria* of cerebral or nerve dyscrasias. Our light is bright on this subject in post-natal relations, and it is inferentially luminous on pre-natal relations of this character.

Presumably, where no real disease is present with the mother, the principal if not the only check upon correct nutritive processes within the generative zone is emotional. We well know the effect of the emotions and sympathies upon the digestive processes. High excitement or long-suppressed emotions have a very direct influence upon the important organs of the body belonging to each of the great systems of organic functional activity. The generative system can by no means be exempt from this law. Indeed, it may yet be shown by the exact histologist that the generative system is the most susceptible of all the systems to impression and change under emotional and other excite-

ments. The center of a new life, such as the germ contents of an ovarian vesicle, will doubtless bear some corresponding relation as an impressionable nerve-center. [As the great centers of parental life: viz., the brain and the heart.] That great center associated with the dual life of mother and germ is, we well know, a seat of great changes and perturbations under the stimulus of emotions. The exalted nerve-action that can produce an orgasm or erethism (which never expends or expresses itself wholly locally) is second to no function prompted by nervous influences in the whole animal economy.

Doubtless the generative zone is the center of stronger and more effective nerve-action than elsewhere; and, if this is true, these checks and stimuli through nerve operations are more effective *there* than elsewhere. The effect upon local nutritive action would be obvious. This would, indeed, be the peculiar direction for the expenditure of important and exceptionally forcible nervous agitations. Arrest of development, either temporary or permanent, or the impulse given toward unequal development, would, therefore, be the reasonable and probable result of mental perturbations in the female upon the initial germ of infantile life held in her possession. We know something of the effects of a sudden overwhelming of nerve-force in a child when the victim of a spasm or convulsive fit. Long years after the incident the dentist will assert that the teeth demonstrate such an event having occurred. If we could search into the deeper recesses of the body with profound anatomical skill and ready apprehension, we should doubtless find many such evidences of arrested or disturbed development in the structures and tissues.

No grand disturbance of the normal action of the organic life can be held blameless of some corresponding alteration of tissual development. Arrests of development, however brief, must require a renewal of evolutionary action, under new and sometimes very different conditions, when development is resumed. The accident of arrest or deviation of development must amount to a perversion of normal development, and hence will be, to a more or less degree, structurally prejudicial. Perfection has been assailed and, in truth, dethroned. If this is liable to happen in average good lives, what must be the consequences in vicious or ill-conditioned lives?

The outcome of this line of reasoning, if not at variance with truth and the facts as we understand them, is to show the necessity of right living, right thinking, right feeling, right associations, and a right appreciation of our personal responsibilities. Our women are the seed- and fruit-bearers of our race. They must be protected and nurtured and governed as we have never heretofore supposed to be necessary if we wish to realize perfection, in even a corporeal sense, in their maternal issues. The unfolding of sanitary, hygienic, educational, moral, and religious responsibilities under this view is enormous. They may well appall the easy-going man of drugs and routine prescriber of the present time. They may well startle the listless, unimaginative parent of this generation. They may well nigh paralyze the superficial social economist, and dismay the complaisant purveyor of modern religion. All have a new thing to

realize. All have a new system to organize. All have new motives for untiring activity in directions as yet little dreamed of.

There is attainable a sort of earthly perfection standing somewhere beyond our immediate reach, but held as a reward of merit to those who recognize the fact and strive to obtain the prize. The pioneer movement has been too long delayed; let us begin, and our posterity will reap the benefit. Long years may follow those of the past before anything like such physical perfection and intellectual exaltation is attained; but, if every work shall be completed before the world shall be obliterated, then we may expect to have great physical and moral excellence upon the earth at some unknown future time. Every little step in the right direction brings it nearer. Leaving these flights of sanguine fancy, and settling down to our present basis of operations, we have to inquire what happy conditions will bring the best results to offspring in this and immediate generations as regards the nerve-force and mental soundness of those yet to be born? What will best antagonize prevailing deteriorating influences? The woman about to be a mother should be in sublime accord with all of nature's best laws. Her life, both corporeal and mental, should be a bulwark against the invasion of conditions detrimental to the perfection of her offspring. The very essence of her life should neutralize all noxious elements. She should start with good physical health, which should be preserved with such care as is bestowed upon no other object. Failure in this respect should not be due to ignorance, heedlessness, self-indulgence, or over-confidence in the harmlessness of petty things.

(To be concluded.)

REMARKS ON CODES OF ETHICS.*

BY

ALFRED MERCER, M.D.,

PROFESSOR OF MINOR AND CLINICAL SURGERY IN THE MEDICAL DEPARTMENT
OF SYRACUSE UNIVERSITY.

TEN years ago I discussed at some length the question of consultation with irregular practitioners. In the closing paragraph of that paper I stated: "From all that we have said, and from all that we have thought on the subject, I believe it is our duty to remain just as we are." Principles have not changed, but our surroundings are constantly varying—the world of medicine even does not stand still. It may not prove to be best to make any change in the law of consultations, but it is right and proper to still further discuss the propriety of making a change. Although much has been said on the subject, it is by no means exhausted. It is a subject that can not be disposed of in a summary way. It can not be stifled by pledges to stand by the old code—thus gagging discussion—to gain admission to any medical society. This is an "irrepressible conflict."

I do not wish to press to a vote to-day the resolution I am about to offer. I wish to hear it discussed, in view of

all surrounding facts, without prejudice or passion, that we may arrive understandingly at a just conclusion. Up to this time I have cast no vote on the code question in any society during the present agitation, not being convinced as to what it was best to do under the circumstances.

The question must come up at Albany in February next. We have more time to discuss it here than we shall have there, in order to arrive at a right understanding as to how to vote. Discussion may change the opinions of some of us. I would offer the resolution, in the spirit of compromise, harmony, and good-will, to all educated, well-meaning medical men, of whatever faith in therapeutics. Yet I shall speak freely in praise or condemnation of the good or the evil that I see in the profession. I would be glad to unmask hypocrisy, the evils of the profession, and the wrongs we do, thus causing the evil to point the way to higher morals and higher duty.

Resolved, That, in view of the present condition of medical practice, it is the sense of this society that the interests of the public and of the profession will be best served by the abolition of all codes.

Mr. PRESIDENT: I do not offer this resolution because I have lost faith in the principles of the old code, although I may have lost some faith in its usefulness in accomplishing the purpose for which it was adopted.

It is not always proper or judicious, it is not always the best thing to do, to further even a good cause, to put the best thoughts of the wisest of men into law. Great changes have taken place in the medical world, outside of and within the limits of the regular profession, since the adoption of the old code.

Surveying the whole field of medicine, seeing things, I believe, as they actually are now, I am of the opinion that any code, of whatever description, is more likely to do harm than good. The old code has always been a target for the shot and shell of the lay press, for ignorance and prejudice, for quacks, learned or unlearned, for mountebanks and impostors of all grades of stupidity and villainy. Abolish the codes, and you will destroy some of their stock in trade, by which they make capital against honest medicine by the cry, "exclusive, exclusive, bigot, bigot."

When the old code was adopted there were none but regular medical schools in the country. The knowledge which the outside world then had of medicine it picked up as best it could. Now these outsiders have more than a score of schools, whose announcements as to time of study, the text-books used, and the branches taught, will bear a favorable comparison with the announcements of our own schools.

I quote from an announcement of one of these schools: "Experience has established the law *similia similibus curantur* as the grand guide in therapeutics; and yet, believing the domain of the law more or less limited, they also, in harmony with the principles of true progress and American institutions, have a breadth and comprehensiveness which do not exclude any thing or any measure which *experience has demonstrated* to be instrumental in relieving human suffering and saving human life." I think we could all admit to fellowship a physician and a college holding these senti-

* Read before the Medical Society of the County of Onondaga, at the seventy-eighth annual meeting, Syracuse, June 12, 1883.

ments so proclaimed to the world. Men holding these sentiments, and proclaiming them to the world, are proper candidates for membership of this society. There may be such in the society already.

Here I might ask a very important question: Why were these schools organized and brought into being? It was supposed that our schools taught everything known or that was worth knowing in medicine. Why, then, were these schools organized? Were they a necessity? Did they fill a vacancy, or supply a want? Were they organized to elevate or lower the standard of medical education, or give a new direction to medical thought and inquiry? All these would be interesting questions to discuss at length. I feel that I do not possess sufficient knowledge and data to discuss them intelligently, and perhaps for our present purpose it is not necessary to discuss them.

We know that these colleges exist by law, and are likely to continue to exist, with full powers to grant licenses to practice medicine. It is of no use to think that these colleges ought not to have been chartered; they are chartered, and are turning out hundreds of graduates annually, to stand side by side and shoulder to shoulder with us before the public.

A very different state of things from that which existed when the old code was adopted, these new conditions force new problems upon us for consideration. The new "living present" is very different from the "dead past" of forty or fifty years ago.

We hear much of the time-honored usages of the profession—that the good and the wise support the old code, and that we must submit to the centralized power of the American Medical Association in regard to ethics, etc. We must discuss this subject on its merits, and not from any of these standpoints, in order to determine whether it is best to stand by the old code, or the new code, or to abolish all codes.

Here I must ask after the character and quality of the graduates of these outside schools. This I can not answer. But this brings us to a subject that is of much greater importance to the public and the profession than any code, old or new—the kind of graduates turned out from all of the schools of the country. The public and the profession should demand a new order of things in granting a license to practice. Confine the power to grant a license to practice to a State board of examiners, and let that examination be thorough and exhaustive; then we shall know that the legally qualified practitioner is our peer in knowledge and a fit associate for consultations, unless cut off by gross immoral practices or quackish proclivities.

The grounds upon which the regular profession has refused consultations have been ignorance and the practice of medicine under some sort of fraud or deception, or some unproved theory or dogma.

The refusal to consult with the outside world of medicine on the score of ignorance has passed away, or is rapidly passing away. I wish I could believe so as to say as much in regard to the practice of fraud and deception.

Although I am in favor of no code, for the present at least, the principles of honor and justice embodied in

the old code will be just as binding on the conscience as ever.

"The leaf may fade and the marble may crumble," but the principles of the old code will endure for ever—knowledge, truth, liberty, and honor, against ignorance, fraud, deception, and dogmatism. The world—the Christian world, even—is not yet educated up to the "higher law" of the old code. No wonder that it is every now and then broken by frail medical men, even though they advocate the old code. We can not escape the code of honor and intelligence if we would.

I am of the opinion that the new code makes a sort of semi "Missouri compromise" with sin. It abandons the "higher law" of the old code, and steps down to accept questionable legal enactments. It does not say we *shall*, but we *may* consult with all legally qualified practitioners. It recognizes the legally qualified doctor as our professional equal.

Although they may be educated, where and what is the honor of many of these legally qualified practitioners? The old code, or no code? The "higher law," or no law in consultation? Men still shout "Hahnemann! Hahnemann!" and prescribe medicines on the principles of Hippocrates. Shall we strike hands and embody into law that we may consult with this fraud? Better let the law of consultation be unwritten, only as it is written on the conscience. Others shout "Eclectic! eclectic!" cry "Wolf! wolf!" where there is no wolf. The regular profession has always been eclectic, using all things, discarding nothing, that could benefit the sick. It thus appropriates, with a free and open hand, all the good of homœopathy—it would be recreant to duty if it did not. Is there anything wrong, any deception, fraud, or robbery in this?

It is fair to assume there can be but one medical science. Hahnemannism has been on trial for nearly a century. Is this not long enough to test its merits and establish its truth?

Has it ever before required a century in an enlightened age, with thousands of earnest seekers and workers, to prove to or to convince the world of a scientific truth? Is homœopathy an exception to this rule? Hahnemann could not possibly have written his "Organon" in the light of the science of to-day. The microscope has exploded his psora theory. The schools bearing his name teach general pathology and pathological anatomy, which is nonsense if the totality of the symptoms constitutes all there is of disease. Infinitesimal dosing is by no means uniformly followed. All there is left of Hahnemannism is a small remnant of the claimed law *similia similibus curantur*. Yet this little is tenaciously clung to as of the greatest importance. It serves, at least, to keep up an opposition to scientific medicine and make a class distinction. Is it fair, is it honest, to announce to the world that disease is treated by the rules of Hahnemann, and then treat it by some other method? Where is the honor of a constantly broken promise? But bad promises are better broken than kept. May not the Hahnemann promise be of this nature? All "regular" prescriptions made under the homœopathic flag go to the credit of Hahnemannism, and thus scientific medicine is cheated and robbed of her just dues.

But most of these men seem to think there is nothing wrong, no evil, no injustice in this. Nevertheless, every honorable man knows that such conduct is wrong, although it may conform to the ordinary "morals of trade," which permit of advertisements that every one knows to be false, and which deceive but few. These gentlemen might ask, Why should the morals of medicine be better than the "morals of trade?" The "morals of trade" should be better than they are. Most men can discover the frauds of trade; but it requires an educated medical man to point out the frauds of medicine. The public are at our mercy in regard to fraud, and our morals should be above suspicion or reproach. Assuming that the irregular physician is educated, to my mind this item of morals is the great stumbling-block in the way of consultations. Outside of this moral obliquity in medicine, his morals and conduct are above reproach. It seems strange to the public, and they can not understand, why we should refuse professional intercourse with these, to them, honorable educated gentlemen. If the homœopaths would say to the world—although we believe in the Hahnemann law of cure, yet, as now developed and understood, it is not equal to all emergencies, and we are, therefore, at times obliged to resort to regular medicine—this would largely dispose of the moral question; then how should we stand in actual consultations, ignorance and morals out of the way? I assume that these men are educated, and are competent to compare their observations with ours in diagnosis. Here we could hold a scientific consultation as to treatment. I expect, when regular medicine is called in, most of the cases have passed beyond the limits of the Hahnemann law. I never heard of such a meeting or consultation—and I have heard of a good many, and have made some myself—where Hahnemannism did not yield to regular medicine. Many of these consultations have been held with homœopaths when everything was regular. Some claim that such meetings are not consultations, the regular making an independent diagnosis and prescription, leaving the homœopathic doctor to act as nurse. It is said that consultation with homœopathy is an impossibility, and can result in no good; that it is a fraud and a cheat to accept a fee for such pretended consultation. If such medical interviews, not to say consultations, result, as they generally do, in science supplanting the dogma, they are productive of some good; they are not frauds, and the physician is worthy of his fee; besides, scientific medicine might possibly learn something from homœopathy—or are we too wise to learn? If the patient understands the tenets of doctors, and wants the opinion of any one of them, it is no fraud to give it, and accept a fee for the opinion.

With no binding consultation code, it is a question whether this liberty would be abused to the detriment of the public or of the profession. No great harm can be done by trying the experiment. If evil comes, we can re-enact the code. Medical science will survive the shock.

Homœopathists complacently survey the field of medical ethics, and smile at our squabbles, alike indifferent to our praise or censure. The important question between them and us is, Are they true to their principles? There can really be but one science of medicine. The soil on which it

grows, the roots, the trunk, and branches, are all the same; our individuality may crop out in different buds and fruit. We differ only in the application of the science. These differences may possibly be classed as schools. I believe the gap that separates educated medical men in practice at the bedside is very small compared with what it seems to be on the surface before the world.

Although these lines are sharply drawn before the world, I have found that they fade out at the bedside. I believe, in practice, the antagonism, the non-intercourse existing between "regular" and irregular physicians is altogether unwarrantable. The irregulars have fallen into ruts of opposition to "regular," honest, liberal, scientific medicine, and would seem to continue this opposition without any sufficient reason—an opposition based, it seems to me, largely on caste and pride of opinion. Both parties, perhaps, are maliciously obstinate, and determined to keep up the war.

I believe among well-educated men the real differences are so slight that, with a little Christian kindness and charity, a little giving up and a little coming down on both sides, we can meet in harmony at the bedside for the good of the patient. There is some perverseness, something wrong somewhere, that we should be so far apart when we are so near together. I believe some way can and will be devised ere long by which educated medical men will come together. It is only a little remnant of the theory that like cures like and obstinacy that keep us apart now. But opposition is the home of some men, and the only place where they can thrive or be happy.

The abolition of all codes may be an honorable step, certainly not a dishonorable one, for us to take in the direction of harmony. This is the only olive branch of peace the regular profession can offer to the irregular profession. But most of the irregulars do not want peace; they desire and thrive under opposition. With no code we offer no opposition, and they will find little to fight. It may take years for bitterness of feeling to die out. Any overtures for peace where peace is not wanted may be spurned with words of contempt and insult, but men can not stand for ever in a false position, even in medicine. Sooner or later the "sober second thought" of truth will prevail.

[The following account of the discussion has been kindly furnished by Dr. D. M. Totman, secretary of the Medical Society of the County of Onondaga.]

After the reading of Dr. Mercer's paper, Dr. WILLIAM MANLIUS SMITH, of Syracuse, made a motion that all discussion of the paper lie over until the next meeting of the society.

The motion was lost, and the discussion was opened by Dr. H. D. DIDAMA, of Syracuse. He stated that Dr. Mercer's paper was inconsistent, and was a good paper in favor of the old code. He then entered into a long argument in favor of the "old code," very much after the manner of the paper presented at the last meeting of the society.

Dr. I. N. GOFF, of Cazenovia, who was present as a delegate from the Madison County Society, said that it was a great mystery to him how Dr. Didama could come to Cazenovia and consult with Dr. Bass, who is a homœopath. Dr. Didama had, to his positive knowledge, been to see Mr. E. S. Cord's child on Lincoln Street. The child had diphtheria, and Dr. Bass was in

attendance. Dr. Didama had also been to Mrs. Mitchell's three or more times, where he also met Dr. Bass.

He said that had Dr. Didama been in Madison County he should have brought the matter up there, and now he wanted an explanation from the doctor.

Dr. DIDAMA acknowledged that he had met Dr. Bass at the bedside several times. That he had treated Dr. Bass simply as a nurse. That he went to make a diagnosis. That he did not consider it a consultation where he went to see a case for diagnosis, gave prescriptions, and had the homœopath carry out the directions.

Dr. J. D. POTTER, of Delphi, said that the father of a patient whom Dr. Didama had seen with Dr. Bass spoke of it as a consultation, and it was so understood.

Dr. E. VAN DE WARKER, of Syracuse, had met Dr. Bass, but did not know up to this time that he was a homœopath.

Dr. J. P. DUNLAP, of Syracuse, had also met Dr. Bass in consultation, and he had advised the friends to continue with Dr. Bass, as it was a hopeless case, and he thought that Dr. Bass would do as well as anybody.

Dr. W. W. PORTER, of Geddes, said that he was called to see a patient, and found Dr. Bass present and in charge. He told the friends that he could not see how Dr. Bass, being a homœopath, could continue in charge; and, not wishing to make a nurse of him, declined to act with him.

And yet he was in favor of the "new code," where every man could make his own conscience his guide.

A motion to adjourn was carried without action being taken on Dr. Mercer's resolution.

THROMBUS OF THE OLECRANON BURSA.

By J. H. POOLEY, M.D.,

PROFESSOR OF SURGERY IN THE TOLEDO MEDICAL COLLEGE.

On July 13, 1883, John Forney, a laboring man of middle age, applied to me on account of a swelling upon his right elbow. He stated that the swelling occurred suddenly, while he was at work digging a ditch. He struck his elbow against the side of the trench, but by no means violently, for it gave him no pain, did not interfere with work, and probably would not have been noticed at all, or even remembered, but for the subsequent swelling, which he noticed for the first time an hour or two afterward.

The swelling was directly over the olecranon bursa, very prominent, of about the size of a pigeon's egg, and of an oval shape. It was perfectly free from pain, tenderness, heat, or discoloration, and did not interfere with the use or movement of his arm. It was tense and fluctuating. I must confess that I was skeptical as to the man's account of its occurrence, and supposed it to be one of those chronic bursal enlargements not unfrequently met with in this situation, and which he had strangely overlooked until the slight blow called his attention to it; but he expressed himself as quite certain that this was not the case, but that it had made its first appearance at the time stated.

I punctured it with a small sharp-pointed bistoury, expecting to see the ordinary yellow glairy fluid spurt out, but, on the contrary, nothing appeared but some dark-colored blood, whereupon I opened it rather freely, and found the swelling mainly occupied by a dark, softish clot. This was squeezed out, and a warm-water dressing ordered. I

saw no more of the man, but heard two weeks afterward that the cut, which had never given him any trouble or interfered with his daily work, was healed up.

We have here, then, a genuine case of thrombus or hæmatocele of the olecranon bursa, an accident which I have never seen before, and of which I have never heard or read any account. The very slight blow which seems to have caused it is remarkable, the more so as the man appeared to be in good health, and presented no rigidity of the superficial arteries, arcus, or other evidence of premature senility, all of which were carefully looked for.

Book Notices.

The International Encyclopædia of Surgery. A Systematic Treatise on the Theory and Practice of Surgery by Authors of Various Nations. Edited by JOHN ASHURST, JR., M. D., Professor of Clinical Surgery in the University of Pennsylvania. Illustrated with Chromo-lithographs and Woodcuts. In six volumes. Vol. III. New York: William Wood & Co., 1883. Pp. xxxix-760.

THE contributors to this the third volume of this important work are Edmund Andrews, Richard Barwell, Edward Bellamy, P. S. Conner, John A. Lidell, M. Nicaise, and John A. Wyeth. The articles by Barwell, Bellamy, and Nicaise will at once attract attention from the well-known reputation of these foreign writers, while those of our own countrymen will not be found to suffer in comparison. The articles contained in this volume are the following: Injuries and Diseases of the Muscles, Tendons, and Fasciæ, by Conner; Injuries and Surgical Diseases of the Lymphatics, by Bellamy; Injuries of Blood-vessels, by Lidell; Surgical Diseases of the Vascular System, by Wyeth; Aneurysm, by Barwell; Injuries and Diseases of Nerves, by Nicaise; and Injuries of Joints, by Andrews.

The chapter on the muscles includes several subjects not usually given in general surgical works, such as hypertrophy and atrophy; granular, pigmentary, fatty, and waxy degeneration; progressive muscular atrophy; and pseudo-hypertrophic paralysis. Each is briefly described, too briefly, in fact, as this subject, with that of the tendons, covers only twenty-five pages; but much that is valuable has been condensed into a small space. The chapter by Bellamy, on the lymphatics, although compressed into sixteen pages, is one of the best in the book. The five hundred pages which follow, and, with those on the diseases of the nerves, constitute the main body of the volume, are devoted to the vascular system, and are divided into three sections: Injuries of Blood-vessels, Surgical Diseases of the Vascular System, and Aneurysm. The first, by Lidell, is composed of what is usually found in text-books under this heading. All the injuries of all the arteries, with the treatment suitable for each case, are considered, and the cases given for illustration show the wide range of reading always manifested in the writings of this author. It is not a subject which admits of any originality, and the author has done all that could be expected in presenting it clearly, fully, and concisely. Wyeth, in the next article, on Surgical Diseases of the Vascular System, has done excellent work, and in handling arteritis, phlebitis, atheroma, thrombus, embolism, and vascular tumors, has contributed a great part of the value which the volume possesses as a whole. From Barwell we expect good work on the subject of aneurysm, and the reader will not be disappointed.

Without saying nearly as much as he might have said, he has covered the ground very thoroughly in fewer than one hundred and seventy-five pages, picking out the salient points in pathology, and in the treatment of each particular variety.

The idea of devoting a special chapter to the surgery of the nervous system in a work of this kind was an exceedingly good one, and Nicaise is a good man for the work. In the hundred pages devoted to it he has dealt with contusions, concussion, and crushing of nerves; with wounds and their treatment; with the phenomena following injuries; with neuritis, neuralgia, tumors, and tetanus; and with the operations practiced upon nerves. In short, he has done what is seldom done in a work on general surgery. The last chapter, on Injuries of Joints, may be summed up in much the same words as the one on injuries of the blood-vessels—much that is good; little that is new.

If the excuse for publishing a new Surgery is the furnishing of new and valuable matter, there is enough of both in the volume to satisfy the purchaser; and for that part which is not new we can only say that it is fully as good as can be found elsewhere.

A Treatise on Therapeutics, comprising Materia Medica and Toxicology, with Especial Reference to the Application of the Physiological Action of Drugs to Clinical Medicine. By H. C. Wood, M. D., Professor of Materia Medica and Therapeutics, and Clinical Professor of Diseases of the Nervous System, in the University of Pennsylvania, etc. Fifth edition, revised and enlarged. Philadelphia: J. B. Lippincott & Co., 1883. Pp. xiii-17 to 740, inclusive. [Price, \$6.]

IN view of the limited time at the author's disposal for preparing this edition, but six months having elapsed since the issue of its predecessor, the reader should not feel impatient if he fails to find in it every therapeutical novelty that has figured in recent periodical literature. He may be sure that almost everything in the materia medica that has passed the period of probation is presented, and in a way that is in every respect satisfactory. As a matter of fact, too, the citations are many of them quite fresh, some being taken from publications brought out during the current year.

Dr. Wood's treatise holds a position by itself, being, in our opinion, the most philosophical work on the subject in the English language, while at the same time it is rich in those details of application that are most welcome to the practitioner.

The Practitioner's Ready Reference Book. A Handy Guide in Office and Bedside Practice. By RICHARD J. DUNGLISON, A. M., M. D., etc. Third edition, thoroughly revised and enlarged. Philadelphia: P. Blakiston, Son & Co., 1883. Pp. x-529. [Price, \$3.50.]

IN speaking of former editions of this work, we have taken occasion to specify the value of the odds and ends of information it furnishes. This edition has been adapted to the new pharmacopœia, and many practical every-day matters, not readily to be found in more pretentious books, have been added. The work well deserves the success it has met with.

A Reply to "The Academy's" Review of "The Wine Question in the Light of the New Dispensation." By JOHN ELLIS, M. D. New York: Published by the author, 1883. Pp. 270.

THE "New Church Academy," which we take to be an organization connected with the Swedenborgian church, is what Dr. Ellis replies to, and not the journal known as "The Academy." It seems that this body had criticised a publication of

the author's in which he maintained that various ancient words, all of which are expressed in English by the word *wine*, were of different signification, some of them referring to the fermented juice of the grape, and others to substances having nothing to do with fermentation. The practical interest of the discussion hinges on the question of whether the approving references to wine in the Scriptures really related to what we now term wine, or to something else, the author maintaining the latter view. No amount of research or reasoning seems to bring us appreciably nearer to a solution of this question, and we can only say that our author handles it dexterously and courteously. Incidentally, a good deal of matter is brought in bearing upon the chemistry of fermentation, and on this account the book is of some interest to medical men.

Working Bulletins for the Scientific Investigation of the Newer Materia Medica. A Plan to Promote Progress in the Science of Pharmacology, etc. Vol. I. Detroit: Parke, Davis & Co., 1883. Pp. xv-207.

IT is well known that the publishers of this *brochure* are manufacturing pharmacists, who have introduced, practically speaking, a great number of drugs of vegetable origin. The real value of many of these drugs is still far from settled. We think the publication under notice will go far toward facilitating the work of establishing the true status of the drugs it treats of, for it will save experimenters the labor of wading through a great mass of literature. By stating the effects that many observers have imputed to the substances in question, it will show at once what it is that is to be proved or disproved. From this point of view, we think the publishers deserve well of the profession, and the work itself may properly enough be said to be made up of "working bulletins."

BOOKS AND PAMPHLETS RECEIVED.

A Text-Book of General Pathological Anatomy and Pathogenesis. By Ernst Ziegler, Professor of Pathological Anatomy in the University of Tübingen. Translated and Edited for English Students by Donald Macalister, M. A., M. B., M. R. C. P., etc. New York: William Wood & Co., 1883. Pp. xv-371. [Wood's Library of Standard Medical Authors.]

Transactions of the College of Physicians of Philadelphia. Third Series, Volume the Sixth. Philadelphia, 1883. Pp. xliv-451.

Die moderne Radikal-Operation der Unterleibsbrüche. Eine statistische Arbeit. Von Dr. H. Leisrink, Oberarzt des israelitischen Krankenhauses zu Hamburg. Hamburg u. Leipzig: Leopold Voss, 1883. Pp. x-115. [Price, 0/7.]

Die Massenverhältnisse des menschlichen Herzens. Von Wilhelm Müller, Direktor des pathologischen Instituts der Universität Jena. Hamburg u. Leipzig: Leopold Voss, 1883. Pp. 220. [Price, 0/9.]

On Some Recent Advances in the Surgery of the Urinary Organs. Being the Address on Surgery delivered before the Fifty-first Annual Meeting of the British Medical Association, at Liverpool, on August 1, 1883. By Reginald Harrison, F. R. C. S., Surgeon to the Royal Infirmary, etc. London: J. & A. Churchill, 1883. Pp. 30.

A Contribution to the Study of Neglected Lacerations of the Cervix Uteri and Perinæum. By Thomas A. Ashby, M. D., Professor of Obstetrics, Woman's Medical College of Baltimore, etc. [Reprint from the "Maryland Medical Journal."]

The Operative Treatment of Hæmorrhoids. By James Whitson, M. D., etc., Surgeon to the Dispensary of Anderson's College, etc. [Reprint from the "Edinburgh Medical Journal."]

THE
NEW YORK MEDICAL JOURNAL,
A Weekly Review of Medicine.

Published by
D. APPLETON & Co.

Edited by
FRANK P. FOSTER, M. D.

NEW YORK, SATURDAY, AUG. 18, 1883.

THE ALLEGED PERSECUTION OF MEDICAL COLLEGES.

IN our issue of June 16th we recorded the fact that the Governor of the State of New York had declined to sign a bill, passed by the Legislature, legalizing the organization of the United States Medical College and, as a consequence, the diplomas issued by the concern. We remarked at the time upon the sweeping character of the bill, and upon its injurious import. At that time a judgment rendered by the Special Term of the Supreme Court in April had declared against the legality of the college, and had enjoined the defendants in the action from further acting, or assuming to act, as an incorporated medical college; and the defendants had taken an appeal to the General Term. On Thursday of last week the decision of the General Term was rendered, in an opinion prepared by Justice Brady, affirming the judgment of the Special Term.

The defendants' counsel is understood to have said that he would take the case to the Court of Appeals, and to have proclaimed his confidence that it would there be settled to his clients' satisfaction. He is reported to have added that, as the case stood now, it was "simply a persecution," a number of young men, presumably the graduates of the college, being "thrown out of business" by the decision, by reason of their diplomas becoming null and void. Of course, the Court of Appeals, before which the case is expected to come up next winter, will see through the persecution plea, and there is nothing to be apprehended on that score in this particular case. The cry of persecution is so readily available as a cloak for all sorts of pernicious doings, however, so potent with the public, and so comforting a sop to the legislative conscience when it comes to the matter of trading votes, that it will be surprising indeed if it is not carried to the extreme in furtherance of more meddling with the processes of the courts on the part of the Legislature.

It will undoubtedly be urged, in behalf of this college and others of the same order, that proceedings are taken against them in the interest of non-sectarian medicine as opposed to the sects. The fact that there is no foundation for this allegation will be difficult to prove, although nothing is surer. The result may be, that the feeble protection now afforded the community by the Medical Practice Act will be taken away by the repeal of the act. In connection, therefore, both with this matter and with the scheme for the establishment of a State examining board, it is of the last importance that individual members of the medical profession should lose no opportunity of disabusing those with whom they come in contact, and especially persons having a voice in legislation, of the notion that

the profession has any desire to make war upon the sects. The community should be given to understand clearly that we have no desire to oppose legal obstacles to the practice of homœopathy, "eclecticism," or any other "system" of therapeutics, nor any idea of bringing persecution to bear upon the professed adherents of the sects, however persuaded we may be that their sectarian garments are put on for *ad captandum* purposes; but that what we are striving for is, that it shall be made impossible for incompetent men to practice medicine with the sanction of the State, no matter what their notions may be as to the propriety or the policy of practicing, or pretending to practice, under this or that dogma, or under no dogma. That this is the real feeling of the profession in the State of New York, there can be no question.

THE RECENT TRAGEDY AT THE NORRISTOWN LUNATIC ASYLUM.

IT is not many months since, as we recorded at the time, the Rev. Heber Newton, having read a paper before the National Association for the Protection of the Insane, at its meeting in Philadelphia, in which he commented severely on the manner in which the insane were treated in lunatic asylums, was given to understand by a Philadelphia neurologist that he had brought his wares to the wrong market, for the insane were always treated well in Pennsylvania.

The latter statement was as irrelevant and uncalled for as could be imagined. It now seems likely to be shown to be untrue also. In our issue of July 21st we alluded to a brutal assault on a patient in the asylum at Norristown, by an attendant, and expressed our surprise that the asylum officials took no steps to secure the offender's arraignment before a court instead of simply dismissing him. The trustees of the asylum have lately been considering the conduct of the physicians in that regard, and we are glad to record that they seem to be of our way of thinking.

A wretch of an attendant, named Gaffey, pounded a patient, a Mr. Fiss, so brutally that the death of the latter, which took place soon afterward, seems clearly to have happened in consequence of the affair. Gaffey's punishment consisted in being "thrown out of business." He wandered about the town for a week or more, seeking employment—eager, no doubt, for an engagement to "tend an invalid." It is only during the current week that he has been apprehended.

Not the least remarkable feature of the matter is the cool impudence with which one of the physicians of the asylum, having been brought before the trustees for examination, jauntily justified his own conduct. He found Mr. Fiss with blood flowing from his face, and discovered that his lower jaw was broken on both sides; yet, when asked if he did not think he ought to have had Gaffey arrested, he replied: "Well, I felt he wouldn't run away if he was wanted. I didn't consider the matter of much importance."

The affair is indeed so outrageous that the superintendent of an asylum in Morristown, N. J., has thought it prudent to call attention in the newspapers to the fact that Morristown is not

Norristown. Possibly Mr. Newton's paper in print will not receive such cavalier treatment as it got when read before the association.

AN INTERNATIONAL ASPECT OF THE FOOT AND MOUTH DISEASE.

A RESOLUTION having passed the British House of Commons opposing the importation of cattle from any country in which the foot and mouth disease prevails, a measure obviously and almost confessedly aimed at the American cattle trade, the Acting Secretary of the United States Treasury has issued a circular to Collectors of Customs and others, embodying a report by the Treasury Cattle Commission, signed by two gentlemen of acknowledged authority in veterinary medicine, and of unquestioned carefulness as observers, in which some facts are made public that can scarcely heighten our sense of the ingenuousness of the British Government.

The Commissioners state that, after a most extended and almost exhaustive inquiry, they have not found a trace of the foot and mouth disease, except in herds just landed from Great Britain, and their investigation has covered all the lines of cattle traffic, from the great rendezvous at Kansas City, Council Bluffs, and Omaha to the Atlantic seaboard. In view of the unmistakable features of the disease, its extreme contagiousness, the well-nigh universal susceptibility of domestic animals to the infection, the remarkably brief duration of its period of incubation, and the fact that so great a dread of the disease pervades the agricultural community that every farmer's club in the line of the trade is constantly on the lookout for the first sign of an outbreak, the Commissioners argue that it can not have existed in the country during the period covered by their investigation and not have come to their knowledge. It certainly seems as if this inference were unassailable.

The report then goes on to the consideration of certain occurrences which, the Commissioners suppose, must have been made the pretext for the action taken by the British authorities, namely, the landing of American cattle in Great Britain suffering from foot and mouth disease contracted on board infected British ships. Two instances are given in which British steamships landed infected Channel Island cattle at our ports—one being the case of the *France*, of the National Line, that landed such a cargo at New York two years ago, and the other that of the *Nessmore*, that did the same thing at Baltimore last March. Both of these vessels went through an attempt at disinfection, and then shipped healthy American cattle for the home voyage—the cattle, of course, contracting the disease on board. In regard to restrictive measures, therefore, it seems that this country would be far more justified in resorting to them than Great Britain.

THE CHOLERA DEBATE AT THE PARIS ACADEMY.

For about the twentieth time, as one of the speakers remarked, M. Jules Guérin recently regaled the *Paris Académie de Médecine* with the stock of data on which he founds his belief that cholera is incapable of transportation, and that there-

fore there is no sense in trying to fight it by quarantine. The occasion was a discussion of a paper that had been read before the academy by M. Fauvel, on the cholera in Egypt.

M. Guérin is a vigorous and somewhat irrepressible disputant, as will readily be called to mind by those who remember his pertinacious efforts to smother the animal vaccination movement in ridicule when M. Depaul's *projet de rapport* was under discussion by the same body nearly twenty years ago. But he seems to be meeting with no more substantial success now than then. In truth, this fact seems to have dawned upon him, for at one of the sessions he complained of what he thought had been said concerning his remarks at a previous meeting—termining the criticism censorious. Being assured by the president, M. Hardy, that nothing improper had been said of him, with a hint that he might have taken it for granted that anything of that sort would not be allowed, M. Guérin was pacified.

M. Guérin allows that cholera is infectious, but maintains that it is not transportable—that the great epidemics that have overrun Europe have not been of Indian origin, but have arisen from local causes. In the course of his remarks in the discussion alluded to, he repeated his expressions of confidence in the home-sanitation policy of the English, and took occasion incidentally to deliver himself of a panegyric on the English sanitary officials in India, speaking of them as "the best in the world."

M. Guérin's data were very thoroughly picked to pieces in the discussion, but he seems to have drawn a satisfactory amount of solace from the reflection that in this matter he was in accord with the greatest masters of science, from Hippocrates down, which is, of course, better than to have coped successfully with his nineteenth-century opponents.

SMALL-POX AND QUACKERY IN ST. PAUL.

IN a recent number of the "Northwestern Lancet," of St. Paul, Minn., we find an account of the circumstances attending a rather remarkable outbreak of small-pox observed in that city last month. It seems that a child, nine years old, that had been in poor health for some time, was put under the care of a female practitioner in St. Paul who styles herself a "magnetic healer." At that time the child had been seized with pains in the back and the limbs, which the "healer" diagnosticated as "sciatic rheumatism." Soon after this the child was found to have fever, and a rash made its appearance—"an eruption of the blood," said the "healer," caused by the "strong medicine" employed before the patient had come under her care. She gave an encouraging prognosis, and persevered with her treatment. Before long, the family and the neighbors bethought themselves of small-pox, and asked the "healer" if it might not be that disease that the child was suffering from. On being asked this question, the woman professed to consult the spirit of a doctor who, she said, had been dead several hundred years. The spirit having assured her emphatically that her patient's sickness was not small-pox, she informed the family to that effect, and repeated her cheerful prognosis. Nevertheless, the child grew worse steadily, the family became dissatisfied, and at last the

father called in a regular physician, who pronounced the case one of confluent small-pox rapidly approaching a fatal termination.

The scene of these occurrences was a large boarding-house, and quite a number of persons were exposed to the disease, the result being, that ten persons were infected, three of whom died. We congratulate the people of Minnesota upon the prospect that their new law regulating the practice of medicine, which is to go into effect in the course of a few months, will put a stop to the mummary that makes such incidents possible; and we commend the moral to be drawn from the story to the attention of those who think that nobody ought to be prevented from practicing medicine.

MINOR PARAGRAPHS.

THE SANITARY COUNCIL OF THE MISSISSIPPI VALLEY.

It is much to be regretted that a misunderstanding has arisen between this body and the Louisiana State Board of Health, both of which we believe to be actuated by genuine devotion to the public health. We have received a communication on the subject from the secretary of the council, of which, for lack of space, we are obliged to postpone the publication.

THE FOOT AND MOUTH DISEASE.

The British Government, in pursuance of its policy of forbidding the importation of cattle from countries where the foot and mouth disease prevails, is reported to have under consideration measures looking to a prohibition of the landing of cattle from the United States. It is stated at the Treasury Department, however, that there is really no prevalence of the disease in this country, as has been shown conclusively by an investigation, and that steps will be taken to represent the matter in its true light to the British Government.

A RAG QUARANTINE IN BOSTON HARBOR.

The Boston Board of Health has a quantity of Egyptian rags stored on Gallup's Island, under canvas. It is proposed to build a warehouse and wharf on the island, for the storage of goods supposed to be infected. It is said, however, that the Government will oppose the project, on the ground that the goods will endanger its employees who are building a sea wall on the west side of the island. But it is argued, on the other hand, that the Government can not properly oppose the scheme, unless it considers the wharf, which it is designed to build in fifty feet of water, an obstruction to navigation.

LEPROSY IN NEW BRUNSWICK.

The newspapers are making the most of a recent visit by Dr. George H. Fox and several other physicians of New York to the province of New Brunswick, for the purpose of investigating a number of cases of leprosy. It is not at all likely that these gentlemen constituted a "commission," as some of the papers say, but it is quite probable that, if Dr. Fox observed anything noteworthy, he will lay it before the New York Dermatological Society.

CONTAMINATION OF THE CHICAGO DRINKING-WATER.

We learn from the "Sanitary News," of Chicago, that the Chicago River is so contaminated with sewage that, in the opin-

ion of a committee of the Citizens' Association, it can be called nothing else than an "abominable sewer." The foul contents of the North Branch are pumped into the lake, and drift out toward the water-works crib, thus contaminating the supply of drinking-water for the city. The committee referred to have made the following recommendations: 1. That the south fork of the South Branch should be purged of its impurities by the introduction of a canal or conduit from the lake along or near Thirty-ninth Street, or by such conduit from near that street to the present pumps at Bridgeport. This should be done without delay. 2. That the introduction of water from the Des Plaines River should be stopped, as far as can be, by the closing of the upper or southern end of the Ogden ditch. 3. That all city sewers should be made to empty into the river, and not into slips or cuttings, nor into the lake. 4. That the Fullerton Avenue pumps should not, under any circumstances, pump toward the lake. The clear water of the lake should always be added to the southward current or the upper or northern part of the Chicago River as it passes the works, and the whole sent forward to the Bridgeport pumping-works. 5. That the Bridgeport pump should be operated to the extent of sixty thousand cubic feet a minute, at all times when there is an observance of unclear water in the river, or when it is necessary to keep the canal-water pure, in accordance with existing State laws.

THE ENTRANCE EXAMINATION FOR THE UNIVERSITY OF PENNSYLVANIA.

It will be seen from our advertising columns that the faculty of the Medical Department of the University of Pennsylvania have made arrangements by which the preliminary examination in English composition and elementary physics, required of candidates who do not hold a college degree or are unable to show an equivalent evidence of proper academic instruction, may be passed in any one of ten different cities in various parts of the country. The faculty are to be commended for having taken such pains to enable young men desirous of matriculating at the University to save the trouble and expense of what might prove a useless journey to Philadelphia.

A PARTIAL QUARANTINE OF CARGOES.

The Health Officer of the Port of New York is said to have stated lately, in a letter read at a meeting of the directors of the Maritime Association, that, if cargo from non-infected ports was well isolated from that taken on board the same vessel at infected ports, and if the history of the vessel in respect to infectious or contagious disease was unobjectionable, the cargo from infected ports only would be required to be discharged in quarantine; and that, by such disposition of the cargo from objectionable ports as would enable the Health Officer to feel assured that the portion of the vessel occupied by such cargo could be thoroughly cleansed and disinfected, considerable time and expense might be saved to importers.

We trust that nothing will happen to show that the Health Officer has been unwise in this matter, but there seems reason to fear serious consequences from the course referred to.

THE AMERICAN VETERINARY HOSPITAL.

We learn from the Eighth Annual Report of this excellent institution that during the year ending February 28, 1883, 2,679 animals were brought to the hospital for advice or treatment, of which 377 were attended to gratuitously. The hospital, which is a department of the American Veterinary College, is situated at No. 141 West Fifty-fourth Street. The medical

staff consists of A. Liautard, M. D., H. F. R. C. V. S., Chief Surgeon; W. J. Coates, M. D., D. V. S., Assistant Surgeon; J. S. Kemp, Jr., D. V. S., and F. Saunders, D. V. S., House Surgeons. According to the Report, the hospital is much in need of enlargement, many animals having been turned away during the year for lack of room.

AN ATTEMPT TO DISCIPLINE VIRCHOW.

ALTHOUGH it is nobody's business but his own that Professor Virchow has seen fit to allow his name to be used as having recommended a proprietary preparation known as Helvetian pills, a German medical society has pointed out to him the sinfulness of his ways. At last accounts not much of an impression seemed to have been made upon him, however.

THE "MEDICAL HERALD" ON PROFESSOR LEEDS.

THE "Medical Herald," of Louisville, quotes the following statement from a lecture by Professor Leeds, of Hoboken, published in our issue of April 28th: "Savory and Moore's food has about thirty-six per cent. of starch, and twenty per cent. of grape and ninety-nine per cent. of cane-sugar, besides nearly ten per cent. of albuminoids." On the strength of this evident error, our contemporary indulges in some humorous remarks, but it omits to state that the passage it quotes from this journal was accompanied by a reference to a table of analyses that had preceded it, in which table the proportion of cane-sugar was correctly given as 9.08 per cent. Since the "Herald" overlooks this plain evidence that the error in question was not Professor Leeds's but, the proof-reader's, we can only infer that printers' errors are unknown in the office of that publication—an inference that we should not otherwise have drawn.

AN ENGLISH ABORTIONIST.

IN one of our London contemporaries we find a recital which goes to show that it is not alone in this country that professed abortionists ply their wretched trade. A servant girl became pregnant by her master, and the latter took her to a dog-dealer, who seems to have formerly been a medical student and to have been in partnership with a medical practitioner, a diploma of the Royal College of Surgeons, in the practitioner's name, having been found in his possession. The dog-dealer performed an operation on the girl, cheering her with the assurance that he had been successful in ninety cases in a hundred. After this the girl went to her home, and, becoming dangerously sick, informed her parents of what had taken place. Both her master and the dog-dealer were brought to trial and convicted, the former being sentenced to seven, and the latter to nine years of penal servitude. At the trial there was medical evidence to corroborate the girl's testimony, and the judge is said to have expressed his belief that the dog-dealer was a professed abortionist, and that his estimate of his success in the practice was probably correct. The singular point about the matter is, that a dog-dealer should have ever been "in partnership" with a medical man practicing under the diploma of the Royal College of Surgeons.

MISTAKEN DIAGNOSES OF SMALL-POX.

THE "Medical Chronicle," of Baltimore, quotes the following from the "New England Medical Monthly": "In Germantown, Pa., recently a lady was sent to the pest-house for small-pox, when it was found that she only had the measles. While in the hospital she took varioloid. Five similar cases were reported in Baltimore during one week. They must have curious health authorities in both of these places."

The "Chronicle" adds this guarded denial: "So far as Baltimore is concerned, we have authority for stating that it is not true that 'five similar cases' of mistaken diagnosis occurred 'during one week.'"

A NEW SERIES OF EMETIC SALTS.

At a recent meeting of the Paris *Académie des Sciences*, a brief note was read from M. de Klein on certain emetic salts of mucic acid, corresponding in constitution with like salts of tartaric acid. The salts chiefly referred to were borico-potassie, borico-sodic, ammoniaco-antimonium, and ammoniaco-antimonie mncates.

BEQUESTS TO HOSPITALS AND THE DELIRIUM OF PERSECUTION.

IN a recent clinical lecture on the variety of insanity termed the delirium of persecution, M. Legrand du Saulle gives his decided conviction that most of the so-called philanthropists who bequeath their property to hospitals, educational institutions, and the like, are really the victims of this sort of mental alienation. Egotistical and avaricious during their life, he says, they pass for benefactors of humanity after they are dead.

THE EFFECT OF MENTAL WORK ON HEALTH.

WHILE there may be some sense in deprecating what has been called the "forcing system" in schools, from a sanitary point, we have never been convinced that intellectual work was often the real cause of the physical ills so freely imputed to it. We are glad to observe, therefore, that Sir Lyon Playfair has recently cited facts before the British House of Commons that positively disprove the theory alluded to. It even appears that an improvement in the health of English youth has followed the enforcement of the Education Act.

NEWS ITEMS.

A MEDICAL PUBLICATION DISPUTE.—On Tuesday Judge Mitchell, of Philadelphia, granted a preliminary injunction restraining Samuel M. Miller, M. D., from continuing the publication of a book which he is issuing under the title, "An Epitome of Medicine, Surgery, and Obstetrics, including Nervous Diseases and the Diseases of Women and Children, by Alfred Stillé, Professor of the Theory and Practice of Medicine in the University of Pennsylvania, D. Hayes Agnew, Professor of Surgery and Clinical Surgery, and R. A. F. Penrose, Professor of Obstetrics." According to the Philadelphia "Press," Professor Stillé and Professor Agnew, upon whose petitions, supported by affidavits, the injunction was issued, declare that this publication is without their authority, and consists only of an incomplete and careless rehash of the oral lectures which they have been delivering to the students at the University, to which the publisher has contributed nothing but the summarization and the errors. They further allege that the publication is calculated to injure them, both professionally and financially.

YELLOW FEVER continues its ravages in Cuba, and several cases are reported to have occurred in Panama during the past few weeks. In Mexico it is epidemic in several towns besides Vera Cruz. Except for the New York health officers' remarkable leniency in the matter of detaining cargoes, the precautions taken at our chief ports seem to be ample for the protection of the country. A steamer has been stationed off the capes of the Chesapeake, to intercept and examine vessels from infected ports.

CHOLERA is still causing a heavy mortality in several Egyptian towns, but it has not thus far passed the limits of the country, and is evidently on the decline. It is said to be prevailing in Atcheen. The San Francisco Board of Health has declared all Asiatic ports infected, and will maintain a rigid quarantine. The German Government has organized an expedition to Egypt, to investigate the disease now prevailing there.

THE SINGULAR DEATH OF A PHYSICIAN.—A story is going the rounds of the newspapers to the effect that a young physician of Chicago, Dr. Rea, lately died of "facial carbuncle," having diagnosticated his own case, and foretold his death, while yet there were no symptoms of any illness, simply from the appearance of the root of a hair which he had pulled out from his moustache, at a point where a pimple had appeared.

THE DUTY ON SULPHATE OF CINCHONIDINE.—An uncertainty has arisen about a point in the interpretation of the new tariff on this alkaloid and its salts. The alkaloid itself is on the free list, but the tariff does not mention its salts. The importers contend that both were intended to be free, while the makers of quinine assert that the sulphate is subject to the old duty of twenty-five per cent.

SMALL-POX is reported to be making great havoc among the Indians in Manitoba, and is prevalent at several points in Mexico.

HARVARD MEDICAL SCHOOL.—Dr. Calvin Ellis has resigned the position of dean of the faculty.

THE AUSTRIAN SYSTEM OF SCHOOL HYGIENE is to be studied by a French commissioner, Dr. Javal.

PROFESSOR G. M. HUMPHRY, F.R.S., will preside over the Congress of the Sanitary Institute of Great Britain, to be held in Glasgow in September.

OBITUARY NOTES.

JACOB S. MOSHER, M. D., OF ALBANY.—Dr. Mosher died suddenly at his residence in Albany on Monday, the 13th inst., at the age of forty-nine. He was born in Coeymans, N. Y., March 19, 1834. He received his collegiate education at Rutgers College, and in December, 1863, graduated from the Albany Medical College. In 1864 he entered the United States Service as a volunteer surgeon, serving in the army of the Potomac before Petersburg. He was subsequently made Assistant Medical Director for the State of New York, on duty in Washington. From 1863 to 1870 he was Deputy Health Officer of the Port of New York, and from 1869 to 1873, inclusive, was Surgeon-General of the State of New York. Dr. Mosher was a member of the Medical Society of the State of New York, and of the New York Neurological Society, and a Fellow of the New York Academy of Medicine. For several years he was Professor of Chemistry and Medical Jurisprudence, and also Registrar and Librarian in the Albany Medical College. He was well known and highly esteemed for his social qualities and literary attainments.

JOSIAH CURTIS, M. D.—Dr. Curtis died suddenly in London on the 1st instant. He was born in Wethersfield, Conn., April 30, 1816, and entered Yale College in 1836. In 1843 he graduated from the Jefferson Medical College. In 1845 he settled in Lowell, Mass., from which city he moved to Boston in 1849. At the outbreak of the war of the rebellion Dr. Curtis was commissioned brigade surgeon by President Lincoln, and served in the field and in hospitals until 1865, when he took up his residence in Knoxville, Tenn. In 1872 he crossed the Rocky Mountains as surgeon, microscopist, and naturalist to the United

States Geological Survey, and in 1873 he was appointed chief medical officer to the United States Indian Service. Dr. Curtis was a member of several medical and scientific societies, and was much interested in matters relating to sanitary science, upon which subject he wrote a number of papers, and made several reports to the Legislature of Massachusetts.

ALEXANDER PATRICK STEWART, M. D., F.R.C.P., OF LONDON.—Dr. Stewart, a Scotchman by birth, but for many years resident in London, died on the 17th ult., at the age of seventy. He made some important contributions to medical literature, and was among the earliest and most enthusiastic of the promoters of the British Medical Association. Our London contemporaries speak fervently of the generous and amiable qualities of the deceased gentleman.

M. PAUL DUBOIS, OF PARIS.—We learn from the "Progrès médical" that M. Dubois died on the 25th of July, at the age of forty-two. He obtained his medical degree in 1868, his graduation thesis, *Étude sur quelques points de l'ataxie locomotrice progressive*, inspired by M. Charcot, being remarkable for its excellence. M. Dubois served as a volunteer surgeon in the Franco-Prussian War, and on many occasions displayed a conspicuous devotion to the welfare of his country. In recognition of his services, he was thrice elected a member of the Municipal Council of Paris.

M. VAN HUEVEL, OF BELGIUM.—The death of M. Van Huevel is announced by the Belgian journals. He was known as the inventor of an exceedingly ingenious forceps-saw for cephalotomy and of an elaborate pelvimeter. He died at an advanced age.

Proceedings of Societies.

COLLEGE OF PHYSICIANS OF PHILADELPHIA.

Meeting of April 4, 1883.

DOES EXCISION OF THE LARYNX TEND TO THE PROLONGATION OF LIFE?—Dr. J. SOLIS COHEN, Honorary Professor of Laryngology in the Jefferson Medical College, read the following paper:

That complete laryngectomy can be performed without sacrifice of life, there is now accumulative evidence. That every operation involving the removal of the larynx imperils the immediate existence of the patient, the records of the procedure abundantly attest. That a very large proportion of the subjects operated upon, say nearly fifty per cent. of them, succumb within so brief a period that their deaths may be justly attributed to the operation, an examination into its statistics renders only too obvious. The writer owns to a prejudice against the operation; he has never witnessed a laryngectomy, nor seen a patient upon whom it had been performed. It may seem rather an assumption on his part, therefore, to criticise an operation of the technical procedure and after-management of which he is practically ignorant.

Let us consult the statistics of the operation, and contrast the average life of those who have been subjected to it with the average life of patients in similar condition, intrusted to palliative treatment. I have before me, as I write, more or less detailed records of sixty-five operations of complete "extirpation of the larynx," as it is termed. There are a number of partial excisions, which have not been brought into the subjoined table because the partial operation is not included in the scope of this paper.

TABLE I.—LIST OF COMPLETE LARYNGECTOMIES, INCLUDING AND SUPPLEMENTING THE TABLES OF MACKENZIE, FOULIS, BLUM, AND BUROW.

No.	Operator.	Date.	Age.	Sex.	Disease.	Parts removed.	Result.	Reference.	Remarks.
1	Watson, Patrick Heron (of Edinburgh).	1866	36	M.	Stenosis from syphilis.	Larynx and one ring of trachea.	Death in 3 weeks from pneumonia.	Foulis; "Transactions International Medical Congress," Aug., 1881, vol. iii, p. 255.	Pneumonia was suspected before the operation.
2	Billroth (Vienna).	1873 Dec. 31	36	M.	Carcinoma of the larynx.	Larynx, lower third of epiglottis, part of the upper two rings of the trachea.	Death from recurrence 7 months after the operation.	"Archiv. f. klin. Chirurgie," Bd. xvii, H. ii, p. 343.	Recurrence noted at end of four months.
3	Heine (Prague).	1874 Apr. 28	50	M.	Carcinoma of the larynx.	Entire larynx.	Death from recurrence 6 months after operation.	"Arch. f. klin. Chir.," Bd. xix, p. 584; "Böhm. Corresp.-Bl." 1874.	
4	Schmidt, M. (Frankfort).	1874 Aug. 12	56	M.	Epithelioma of the larynx.	Thyroid, cricoid, and both arytenoid cartilages.	Death on the fourth day from collapse.	"Arch. f. klin. Chir.," Bd. xviii, H. i, p. 189.	
5	Maas (Breslau).	1874 June 1	57	M.	"Adeno-fibroma carcinomatosum."	Entire larynx.	Death from pneumonia 2 weeks after operation. "On fourth day," Blum.	"Arch. f. klin. Chir.," Bd. xix, p. 507.	
6	Watson, P. H. (Edinburgh).	1874	60	M.	Epithelioma of larynx extending to left vocal band.	Larynx.	Death from pneumonia in 2 weeks.	Foulis; "Trans. Int. Medical Congress," 1881.	
7	Schönborn (Königsberg).	1875 Jan. 22	72	M.	Carcinoma of the larynx.	Entire larynx.	Death on the fourth day.	"Berliner klin. Woch.," Sept. 20, 1875, p. 525.	
8	Bottini (Turin).	1875 Feb. 6	24	M.	Sarcoma (partly round-celled, partly spindle-celled) of the larynx.	Entire larynx.	Well April 19, 1881, probably still alive.	"Comunicazione della R. Accademia di Medicina di Torino," April 30, 1875. Letter from Prof. Bottini to Dr. Foulis.	The operation entailed copious hæmorrhage, and was followed by severe erysipelas.
9	Langenbeck (Berlin).	1875 July 21	57	M.	Carcinoma of upper part of larynx, of the epiglottis, and of the hyoid bone.	Entire larynx, hyoid bone, part of the tongue, pharynx, and œsophagus.	Death from recurrence in cervical lymphatic glands, 4 months after.	"Berlin. klin. Woch.," 1875, No. 33, p. 453; "Arch. f. klin. Chir.," Bd. xxi, Supplem., p. 136.	
10	Multanowski (St. Petersburg).	1875 July 27	59	M.	Carcinoma.	Entire larynx.	Death from croupous pneumonia 3 mos. after operation.	"Centbl. f. Chir.," 1882, No. 25, and letter from Dr. A. Schmidt to Prof. Burow ("Arch. of Laryng.," N. Y., April, 1883).	
11	Multanowski (St. Petersburg).	1875 Aug. 9	47	M.	Carcinoma.	Entire larynx.	Death from recurrence 2 months after operation.	As above.	
12	Billroth (Vienna).	1875 Nov. 11	54	M.	Diffuse carcinoma of the larynx.	Entire larynx.	Death on the fourth day from extensive broncho-pneumonia.	Billroth's Clinical Surgery, London, 1881, p. 133.	Had not been preceded by tracheotomy; wound did well, with but little febrile reaction.
13	Maas (Freiburg).	1876 Feb. 5	50	M.	Epithelioma of the larynx.	Entire larynx, with exception of the epiglottis and of a small piece of the cricoid cartilage.	Death from recurrence 6 months after the operation.	"Arch. f. klin. Chir.," Bd. xx, p. 535. Private communication from operator to Dr. Foulis, "Trans. Int. Med. C.," London, 1881.	Recurrence in posterior portion of tongue about 3 months after operation. Death by hæmorrhage from the ulcerated mass.
14	Gerdes (Jever).	1876 Mar. 30	76	M.	Carcinoma.	Entire larynx.	Death on the fourth day from collapse.	"Arch. f. klin. Chir.," Bd. xxi, H. ii, p. 473.	
15	Reyher (Dorpat).	1876 May	60	M.	Carcinoma of the vocal bands.	Entire larynx, with exception of epiglottis.	Death on the eleventh day from hypostatic pneumonia.	"St. Petersburger med. Woch.," 1877, Nos. 17 and 18.	
16	Watson, P. H. (Edinburgh).	1876	60	F.	Epithelioma of larynx, with enlargement of some adjacent glands.	Larynx and enlarged glands.	Death in one week from pulmonary embolism.	Letter from operator to Dr. Foulis.	The lingual and facial veins were cut in the operation.
17	Kosinski (Warsaw).	1877 Mar. 15	36	F.	Epithelioma of the larynx, with perforation of the skin.	Entire larynx.	Death from recurrence 9 months after operation.	"Centbl. f. Chir.," 1877, No. xxvi, p. 401. Private communication from operator to Dr. Foulis.	
18	Foulis (Glasgow).	1877 Sept. 10	28	M.	Sarcoma, "partly papilloma, partly spindle-celled sarcoma."	Entire larynx, with exception of superior cornua of thyroid cartilage and half the arytenoid cartilages.	Death from tracheal and pulmonary phthisis, March 1, 1879.	"Lancet," Oct. 13, 1877, and Mar. 29, 1879.	

No.	Operator.	Date.	Age.	Sex.	Disease.	Parts removed.	Result.	Reference.	Remarks.
19	Wegner (Berlin).	1877 Sept. 16	52	F.	Carcinoma of the larynx, size of walnut, originating from right ventricle.	Entire larynx, with epiglottis, but leaving lower half of the cricoid cartilage.	Well April 12, 1878.	"Verh. der deutsche Gesellsch. f. Chir.," 1878. Private communication from operator to Dr. Foulis.	
20	Bottini (Turin).	1877 Aug. 29	48	M.	Epithelioma of the larynx.	Entire larynx and portion of oesophagus.	Death on the third day from double pneumonia.	"Annales des maladies de l'oreille et du larynx," July 1, 1878; "Centbl. f. Chir.," 1878.	Performed "bloodlessly" with galvano-cautery blade.
21	Bruns, Victor von (Tübingen).	1878 Jan. 29	54	M.	Epithelioma of the larynx (of five years' duration).	Entire larynx.	Death from recurrence 9 months after operation.	"Wien. med. Presse," Nov. 17, 1878. Communication from Prof. Paul Bruns to Dr. Foulis.	Preliminary tracheotomy not performed. Collapse after operation, and hyperpyrexia for a week. Voice-tube employed in five weeks.
22	Rubio (Madrid).	1878 May 11	41	M.	Perichondritis of the thyroid cartilage, with necrosis.	Entire larynx.	Death on the fifth day from marasmus.	"Observacion Clínica," etc. Real Academia de Med., Madrid, 1878.	
23	Czerny (Heidelberg.)	1878 Aug. 24	46	M.	Sarcoma in and under vocal bands, and perforating the thyroid cartilage; also involving the neighboring glands.	Entire larynx, and the diseased glands.	Death 15 months after operation (as the result of a new operation?).	Letter from operator to Dr. Foulis. Schüller, "Die Tracheotomie," Billroth und Lücke's "Deutsche Chirurgie," 1880, p. 200.	Repeated removals of recurring masses.
24	Billroth (Vienna).	1879 Feb. 27	43	F.	Epithelioma of pharynx, larynx, and thyroid gland.	Entire larynx, with part of pharynx, and oesophagus.	Death during seventh week from passage of bougie into mediastinum.	Private communication from operator to Dr. Foulis.	
25	Gussenbauer (Prague).	1879 May 24	24	M.	Carcinoma.	Entire larynx.	Death 2 months after operation from tuberculosis pulmonum.	Letter from operator to Prof. Burow. "Arch. of Lar.," April, 1883.	
26	Macewen, Wm. (Glasgow).	1879 July 31	56	M.	Carcinoma of larynx and upper end of gullet; also a glandular mass at left side of neck.	Larynx, part of gullet, and the glandular mass.	Death in 3 days from pneumonia.	Foulis, "Trans. Int. Med. Con.," London, 1881.	
27	Caselli, Azzio (Reggio-Emilia).	1879 Sept. 20	19	F.	Sarcoma of larynx, pharynx, palate, and base of tongue.	Entire larynx, pharynx, base of tongue, soft palate, and tonsils.	Well August, 1881 (probably still living).	"Bull. delle Scien. Med.," Bologna, 1880, vol. v.; "Centbl. f. Chir.," 1880; Caselli's reprint, Bologna, 1880. Caselli's statement at meeting Int. Med. Con., London, 1881.	Operation occupied more than three hours, was largely done with the galvano-caustic blade, and was attended with but little hæmorrhage.
28	Lange, F. (New York).	1879 Oct. 12	74	M.	Sarcoma of larynx involving the gullet.	Larynx, right cornu of hyoid bone, part of gullet.	Death from asthenia nearly 7 months after operation. Recurrence.	"Archives of Laryngology," N. Y., 1879, p. 36.	
29	Multanowski (St. Petersburg).	1879 Dec. 4	60	M.	Carcinoma.	Entire larynx.	Death on fifth day from pneumonia.	"Centralbl. f. Chir.," 1882, No. 25. Letter from Dr. A. Schmidt to Prof. Burow, "Arch. of Lar.," April, 1883.	
30	Langenbuch	1879	An aged female.				Death on third day from collapse.	"Verh. der deutsche Ges. f. Chir.," Bd. x.	Only met by compiler in Blum's list, "Arch. gén. de méd.," 1882, ii, p. 79.
31	Reyher, Carl (St. Petersburg).	1880	48	M.	Carcinoma.	Larynx.	Death on seventh day from septic broncho-pneumonia.	"Wolner's med. Jour.," 1880. H. i. Letter from operator to Dr. Foulis.	
32	Thiersch (Leipsic).	1880 Feb. 26	36	M.	Carcinoma.	Entire larynx and two rings of trachea.	Well 18 months after operation.	"Deutsch. Ztschr. f. Chir.," 1881, xvi, p. 149. "Centbl. f. med. Wiss.," Sept. 23, 1882. "Revue mens. de larynx," No. 82, p. 360, but accredited to Landerer.	Tracheotomy Sept. 27, 1879. Laryngotomy for access to growths, Feb. 3, 1880.
33	Thiersch (Leipsic).	1880 April 15	52	M.	Carcinoma.	Entire larynx.	Well 17 months after operation.	As above.	Tracheotomy, Mar. 2, 1880.

No.	Operator.	Date.	Age.	Sex.	Disease.	Parts removed.	Result.	Reference.	Remarks.
34	Czerny (Heidelberg).	1880 Oct. 11	47	M.	Epithelioma of larynx and superjacent soft parts.	Larynx and soft tissues in front of it.	Death from exhaustion and hæmorrhage 5 months (March 25, 1881) after.	Letter from operator to Dr. Foulis.	
35	Hahn (Berlin).	1880 Oct. 23	67	M.	Carcinoma.	Larynx, all except a portion of the thyroid cartilage.	Free from recurrence 2 years after operation.	Letter from operator to Prof. Burow. "Archives of Laryngology," April, 1883.	
36	Thiersch (Leipsic).	1880 Nov. 10	45	F.	Carcinoma of pharynx and larynx.	Larynx and part of pharynx.	Death from recurrence in 4 months (March 16, 1881).	"Deutsch. Ztsch. f. Chir.," 1881, xvi, p. 149.	Tracheotomy, Oct. 17, 1880. Recurrence noted within 6 weeks after operation.
37	Bircher, H. (Aarau).	1880 Dec. 3	49	F.	Scirrhus of the thyroid gland, involving the larynx.	Thyroid gland excised: 6 months later the cancer recurred, and the larynx was excised with part of the gullet.	Death in 16 days from pneumonia and gangrene of the lung.	Letter from operator to Dr. Foulis. "Trans. Int. Med. Congress," 1881.	
38	Pick (London).	1881 Jan. 16	39	M.	Epithelioma of larynx (preceded by papillomata).	Larynx and epiglottis.	Death in 5 days from pleurisy and pericarditis.	"Lancet," April 2, 1881, p. 541. "Brit. Med. Jour.," April 9, 1881, p. 562.	
39	Thiersch (Leipsic).	1881 Jan. 17	57	F.	Carcinoma of pharynx and larynx.	Entire larynx and part of pharynx.	Death on seventh day from secondary infectious pneumonia.	"Deutsch. Ztsch. f. Chir.," 1881, Bd. xvi, p. 149.	Tracheotomy, Dec. 9, 1880.
40	Toro (Cadiz).	1881 March 9			Epithelioma of larynx.	Hyoid bone, base of tongue, and larynx.	Death on fourth day from pulmonary emphysema.	"Med. Record," N. Y., August 6, 1881, p. 167.	
41	Winiwarter (Liège).	1881 April	55	F.	Carcinoma.	Entire larynx.	No recurrence 11 months after operation.	"Clinique chir. univ. Liège"; "Monatsehr. f. Ohrenheilk.," 1882, No. 9. Burow's list.	
42	Foulis (Glasgow).	1881 April 30	50	M.	Epithelioma of larynx (preceded by papillomata).	Larynx.	Well and strong August, 1881.	"Brit. Med. Jour.," May 7, June 11, 1881; "Trans. Int. Med. Congress," London, 1881.	
43	Czerny (Heidelberg).	1881 May 12	47	M.	Epithelioma.	Larynx and upper two rings of trachea.	Well and strong August, 1881.	Letter from operator to Dr. Foulis. Verbal report to Int. Med. Cong., London, 1881.	
44	Reyher, Carl (St. Petersburg).	1881 May 14	57	M.	Carcinoma.	Larynx.	Death on fifth day from septic broncho-pneumonia.	Letter from operator to Dr. Foulis. "Trans. Int. Med. Congress," 1881.	
45	Koehler (Berne).	1881 May 16	59	M.	Carcinoma.	Entire larynx, except a piece of the cricoid cartilage.	No recurrence 16 months after operation.	Letter from operator to Prof. Burow. "Arch. of Larynx.," N. Y., April, 1883.	Patient wears a self-made artificial epiglottis to overcome choking in deglutition, result of excision of epiglottis.
46	Tilanus (Amsterdam).	1881 May	51	M.	Epithelioma.	Entire larynx.	Death in 36 hours from collapse.	"Centbl. f. Chir.," 1882, No. 34.	
47	Gussenbauer (Prague).	1881 May 19	48	M.	Carcinoma.	Entire larynx.	Well 19 months after operation; doing duty as a riding-master.	Letter from operator to Prof. Burow. "Arch. of Larynx.," N. Y., April, 1883.	
48	Volker (Brunswick).	1881 May 28	44	F.	Carcinoma epithelioides.	Entire larynx.	Death from suffocation 5 months after operation.	"Academisch Proefschrift," Amsterdam, 1882, pp. 84 and 112.	Suffocated while patient had withdrawn cannula to cleanse it.
49	Albert (Vienna).	1881 July 6	45	M.	Carcinoma, almost filling right half of larynx.	Entire larynx, except epiglottis; also small section of adherent œsophagus.	Death on eighth day from diffuse bronchitis and lobular pneumonia.	"Wien. med. Presse," 1881, xxii, p. 1373.	On 13th, hæmorrhage from internal carotid, arrested by ligature above and below point of erosion. Collapse same evening; death next day.
50	Hahn (Berlin).	1881 Aug. 13	46	M.	Carcinoma.	Entire larynx.	Death in 25 days from putrid bronchitis.	Letter from operator to Prof. Burow.	
51	Margary (Turin).	1881 Sept. 29	36	F.	Epithelioma of œsophagus and larynx.	Larynx, first ring of trachea, thyroid body, part of pharynx, and œsophagus.		"Arch. Ital. di Lar.," Jan. 15, 1882.	Recurrence at end of three months.
52	Gussenbauer (Prague).	1881 Oct.	62	M.	Carcinoma.	Entire larynx.	Strong and well 14 months after operation.	Letter from operator to Prof. Burow.	

No.	Operator.	Date.	Age.	Sex.	Disease.	Parts removed.	Result.	Reference.	Remarks.
53	Reyher, Carl (St. Petersburg).	1881 Oct. 10	73	M.	Carcinoma.	Larynx and upper three rings of trachea.	Death from recurrence, 9 months after operation.	"St. Petersburg. med. Ztschr.," 1882, No. 28. Letter from operator to Prof. Burow.	
54	Reyher, Carl (St. Petersburg).	1881 Oct. 10	65	M.	Carcinoma.	Larynx.	Death on seventh day from septic pneumonia.	As above.	
55	Novaro.	1881	63	M.	Carcinoma.	Entire larynx.	Recurrence in four months. Excision of right lobe of thyroid gland and part of pharynx. Death from hæmorrhage on 11th day.	"Giorn. di R. Acad. di Med. di Torino," vol. xxxix, 1881, p. 39; "Arch. Ital. di Lar.," July 15, 1882.	
56	Schede.	1881	54	M.	Cancroid.	Larynx, hyoid bone, and thyroid gland.	Two months later the patient was fitted with an artificial larynx.	"Deutsche med. Woch.," 1882, No. 33, p. 45.	
57	Reyher, Carl (St. Petersburg).	1882 April 7	55	M.	Carcinoma epithelioides.	Entire larynx, pharynx, and parts of œsophagus.	Death 14 days after operation from exhaustion.	Letter from operator to Prof. Burow.	
58	Kocher (Berne).	1882 May 13	54	M.	Carcinoma.	Entire larynx and carcinomatous glands.		Letter from operator to Prof. Burow.	Recurrence seven months after operation.
59	Whitehead, Wm. (Manchester).	1882 May 27	46	M.	Epithelioma of right vocal band and parts subjacent (as far down as upper portion of trachea).	Thyroid and cricoid cartilages and two rings of trachea, leaving epiglottis intact.	Well January 31, 1883. Probably still alive.	"Lancet," Nov. 4, 1882, p. 741. Letter from operator to compiler, dated Jan. 31, 1883.	
60	Bergmann, von (Würzburg).	1882 June 12	54	M.	Carcinoma (Adenocarcinoma?).	Entire larynx.	Speaks well with artificial (Bruns) larynx some months after operation.	"Sitzungsber. würzburg. phys. Gesell.," 1882, 47-56. "Deutsche med. Woch.," 1882, No. 35; "Centbl. f. Chir.," Aug. 19, 1882.	
61	Burrow (Königsberg).	1882 July 7	44	M.	Carcinoma.	Entire larynx without epiglottis.	Death from sudden suffocation $4\frac{1}{2}$ mos. after operation.	"Archives of Laryngology," April, 1883.	
62	Kocher (Berne).	1882 Sept. 28	43	M.	Carcinoma.	Entire larynx and a portion of œsophagus.		"Sammlung klin. Vorträge" v. Volkmann, No. 224, p. 1944.	
63	Maydl (Vienna).	1882	50	M.	Carcinoma.	Larynx, except cricoid cartilage. Excision of a gland, size of a dove's egg.	No recurrence 3 mos. after operation.	"Wien. med. Presse," 1882, xxiii, 1672; "Wien. med. Woch.," 1882, No. 44. Letter from operator to Prof. Burow.	
64	Ruggi.	1882	10	M.	Polypi of the larynx.	Entire larynx.		"Centbl. f. Chir.," 1882, No. 45; "Raccogli-tore Med.," 1882, xviii, p. 36.	"Recovery in 28 days." Burrow's list.
65	McLeod (Calcutta).	1882	35	M.	Papilloma of larynx.	Entire larynx and thyroid gland.	In good condition one month later.	"Ind. Med. Gaz.," 1883, xviii, 24-26.	

Of these sixty-five complete operations, four were performed in non-malignant cases; one for cicatricial syphilitic stenosis, with death "some weeks after from pneumonia" (Case 1) [Watson]; one for necrosis, the case terminating fatally by marasmus five days after the operation (Case 22) [Rubio]; one for polypi of the larynx (Case 64) [Ruggi]; and one for papilloma of the larynx (Case 65) [McLeod].

Of the sixty-one operations remaining in this list, five were performed for sarcoma; in two of which the results were so remarkably exceptional that attention should be especially directed to them.

I. Bottini, of Turin, on February 6, 1875, removed the entire larynx from a male subject twenty-four years of age, with a laryngeal sarcoma, partly round-celled, partly spindle-celled. Notwithstanding copious hæmorrhage and severe erysipelas, the patient recovered. He was reported well in August, 1881, or more than six years after the operation, and I have seen no notice of his death. He had been performing the duties of a postman, and walking eight miles a day. This is the most successful case on record.

II. Caselli, of Reggio-Emilia, on September 20, 1879, removed the larynx, pharynx, base of the tongue, soft palate and

tonsils, from a female subject nineteen years of age, for a sarcoma of the larynx, pharynx, palate, and base of tongue. The patient was reported well in August, 1881, practically two years after the operation, and I have seen no notice of her death. This is the second best case on record.

The remaining three patients operated upon for sarcoma died at the periods of seven, fifteen, and seventeen and a half months, respectively.

TABLE II.—CASES OF SARCOMA.

1 (Lange) lived nearly 7 months.

1 (Czerny) " " 15 "

1 (Foulis) " " 17½ "

1 (Caselli) was alive August, 1881, nearly 2 years after operation.

1 (Bottini) was alive and well August, 1881, 6½ years after operation.

Taking for granted, as we are bound to do, that death was imminent in these five cases of sarcoma when the operation was resorted to, we have a considerable prolongation of life in every instance, and a remarkable prolongation in two, or in forty per cent. As far as these limited statistics go, therefore, the operation of excision of the larynx in hopeless cases of sarcoma is worthy the serious consideration of the surgeon.

The history of the remaining fifty-six operations presents a much more gloomy account. They were all for carcinoma, if we may include under that head Schede's case (56) of "canceroid."

Let me read the list of deaths as far as reported :

TABLE III.—RECORDED DEATHS AFTER LARYNGECTOMY FOR CARCINOMA.

1. Tilanus,	Case 46.	Death in 36 hours from collapse.
2. Macewen,	" 26.	" 3 days " pneumonia.
3. Bottini,	" 20.	" 3 " " "
4. Langenbuch,	" 30.	" 3 " " collapse.
5. Schmidt,	" 4.	" 4 " " "
6. Gerdes,	" 14.	" 4 " " "
7. Billroth,	" 12.	" 4 " " pneumonia.
8. Toro,	" 40.	" 4 " " pulmonary emphysema.
9. Schönborn,	" 7.	" 4 " " ?
10. Multanowski,	" 29.	" 5 " " pneumonia.
11. Reyher,	" 44.	" 5 " " septic broncho-pneumonia.
12. Pick,	" 38.	" 5 " " pleurisy and pericarditis.
13. Reyher,	" 31.	" 7 " " septic broncho-pneumonia.
14. Reyher,	" 54.	" 7 " " septic pneumonia.
15. Watson,	" 16.	" 7 " " pulmonary embolism.
16. Thiersch,	" 39.	" 7 " " "secondary infectious" pneumonia.
17. Albert,	" 49.	" 8 " " "diffuse bronchitis and lobular" pneumonia.
18. Reyher,	" 15.	" 11 " " "hypostatic" pneumonia.
19. Reyher,	" 57.	" 14 " " exhaustion.
20. Maas,	" 5.	" 2 weeks " pneumonia.
21. Watson,	" 6.	" 2 " " "
22. Bircher,	" 37.	" 16 days " pneumonia and "pulmonary gangrene."
23. Hahn,	" 50.	" 25 " " putrid bronchitis.
24. Billroth,	" 24.	" 6 weeks " passage of bougie into mediastinum.
25. Multanowski,	" 11.	" 2 mos. " recurrence.
26. Gussenbauer,	" 26.	" 2 " " tuberculosis pulmonum.
27. Multanowski,	" 10.	" 3 " " "croupous" pneumonia.
28. Langenbeck,	" 9.	" 4 " " recurrence.
29. Thiersch,	" 36.	" 4 " " "
30. Novaro,	" 55.	" 4 " " recurrence and hæmorrhage consequent upon additional operative procedures.
31. Von Burow,	" 61.	" 4½ " " sudden suffocation.
32. Czerny,	" 34.	" 5 " " recurrence.
33. Volker,	" 48.	" 5 " " suffocation.
34. Heine,	" 3.	" 6 " " recurrence.
35. Maas,	" 13.	" 6 " " "
36. Billroth,	" 2.	" 7 " " "
37. Bruns,	" 21.	" 9 " " "
38. Kosinski,	" 17.	" 9 " " "
39. Reyher,	" 53.	" 9 " " "
40. Czerny,	" 23.	" 15 " " "

To this list may be added the cases of:

Margary, Case 51, in which recurrence was reported at 3 months.
Kocher, " 58, " " " 7 "

In the following cases neither death nor recurrence has been reported :

1. Foulis, Case 42, alive 5 weeks after operation.
2. Czerny, " 43, " 6 " " "
3. Schede, " 56, artificial larynx adjusted 2 months after operation.
4. Mayal, " 63, no recurrence 3 months after operation.
5. Von Bergmann, " 60, alive "some" " " "
6. Wegner, " 19, " 7 months after operation.
7. Whithead, " 59, "no recurrence"; alive 8 months after operation.
8. Winniwarter, " 41, "no recurrence"; alive 11 months after operation.
9. Gussenbauer, " 52, well 14 months after operation.
10. Kocher, " 46, no recurrence 16 months after operation.
11. Thiersch, " 33, well 17 months after operation.
12. Thiersch, " 32, " 18 " " "
13. Gussenbauer, " 47, " 19 " " "
14. Hahn, " 35, " 2 years " " "

Of the forty reported deaths, seventeen, or forty-two and a half per cent., occurred within eight days, and five more succumbed within the second period of eight days.

The danger during the first few days is from shock and from pneumonia. Very few have perished from direct shock, very many from pneumonia. The pneumonia has been attributed generally to the ingress of blood, aliment, and septic materials into the air-passages; but, if I may form an opinion from what I have witnessed in many other operations upon the neck, there is a certain amount of risk of pneumonia in all surgical interferences in the cervical region, even when the air-passage is not opened. Thus, I have seen it follow extirpation of the thyroid gland, extirpation of cervical neoplasms, and even exploratory incision into the region. It may be that the reduction of temperature to which the pneumogastric nerve is subjected leads to pneumonia, and that the manipulations within the wound render it especially sensitive. When we reflect that the majority of these operations of laryngectomy consume from one to three hours in their performance, we can fairly presume that the pneumogastric nerve is subjected to sufficient ordeal to excite an early pneumonia, quite independently of access of foreign matter to the lungs—a sequel of the operation against which every available precaution is taken.

The danger from pneumonia does not seem to exist longer than two weeks, for we have but one record of death from this cause after the sixteenth day, and that from "croupous pneumonia" (Case 10), at the end of three months. This important fortnight safely passed, the life of the patient appears comparatively secure up to the fourth month. At the fourth month, death begins to be imminent from recurrence, and we have, in our table, three at four months; one, and possibly several, within five months; two at six months; one at seven months; three at nine months; and one at fifteen months. One death from recurrence (Case 11) is reported at two months after operation. Nine patients are reported living at seven, eight, eleven, fourteen, sixteen, seventeen, eighteen, nineteen, and twenty-four months, respectively. Thus forty-two and one half per cent. of the forty cases, recorded as terminating fatally, or more than thirty per cent. of the entire number of patients operated upon for carcinoma, perished within eight days; and, at the end of six months, thirty-five of the forty were dead, or eighty-seven and one half per cent.: making sixty-two and one half per cent. of the entire fifty-six operations for carcinoma; with great probability of a still higher percentage had all the deaths been reported.

Let us contrast this record with the average life of carcinoma of the larynx not subjected to the radical operation of laryngectomy. Of a number of patients with carcinoma of the larynx under my own care, who agreed to submit to exsection of the larynx should I so determine, and in whom I performed tracheotomy in preference, one lived six months, two lived seven months, one lived thirteen months, and one eighteen months, respectively, after the tracheotomy.

Had laryngectomy been practiced in these five cases, with equal tenure of existence, the result would have been accredited to the radical procedure. Had the operation been performed, one life might possibly have been prolonged; the majority, however, would probably have been shortened. At the period at the end of which eighty-seven and a half per cent. of the recorded deaths after laryngectomy had occurred, i. e., six months, all my tracheotomized patients were living; and but two of the entire number of fifty-six in whom excision was performed for carcinoma outlived the longest-lived instance in my tracheotomized list. It is not improbable that a complete series of collated statistics would present a far better exhibit for the cases merely subjected to tracheotomy and palliative procedure. It is generally believed that the natural history of carcinoma of the larynx comprises an average existence of about two years and a half; tracheotomy becoming requisite at a period varying from nine to eighteen months, according as the disease is wholly intra-laryngeal or more parietal.

In laryngectomy, the initial shock is severe, and sure to carry off a large percentage of patients by collapse or by pneumonia. A certain number of lives are sacrificed; and the condition of the survivors, with their artificial substitutes for the larynx, is often described as pitiable in the extreme.

In tracheotomy, there is little shock, very slight danger of pneumonia, and much less risk of septic infection. Life is not likely to be sacrificed in any instance; and existence is much more comfortable after the operation than after laryngectomy.

For these reasons, excision of the larynx for carcinoma does not, in my opinion, tend to the prolongation of life; for the prolonged existence of a very few seems purchasable only at the sacrifice of the remnants of existence of many others. The greatest good to the greatest number appears better secured by dependence on the palliative operation of tracheotomy.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

A STATED meeting was held May 3, 1883, the President, R. A. CLEEMANN, M. D., in the chair.

THREE STUBBORN CASES OF VESICO-VAGINAL FISTULÆ SUCCESSFULLY TREATED AFTER THE OPERATION WITHOUT THE USE OF THE CATHETER.—Dr. W. GOODELL related the histories. The first patient, after a non-instrumental labor lasting from a Tuesday evening, when the membranes broke, to a Friday night, found that her urine dribbled away immediately after the birth of the child. The fistula was situated so close to the cervix as to implicate it, and was quite large. Sixteen months after the accident she was operated on by a distinguished surgeon, whose success in uro-genital fistulæ was very great. He turned the cervix into the bladder and successfully closed up all the rent save a small portion of it. On this fistula he operated three times without any union whatever. In each instance the urine dribbled away before the stitches were removed, and on two occasions an alarming hæmorrhage came *per vaginam*. This information Dr. Goodell obtained from the surgeon himself.

Early in 1877 Dr. Goodell operated on her at the Hospital of the University of Pennsylvania, and put in Sims's self-retaining catheter. Eight sutures were needed to close the opening. The

next day a hæmorrhage from the bladder, possibly menstrual, took place and lasted several days. A fever also set in which gave some alarm. When the stitches were removed, very little union was found to have taken place. Four months later, Dr. Goodell operated for the second time, and, thinking that the vesical hæmorrhage in the preceding operation was caused by the irritation of the self-retaining catheter, he treated her without one. The first twenty-four hours her urine was drawn off every four hours, but afterward she was allowed to pass it herself. No hæmorrhage occurred, and perfect union took place.

The second case was also one of tedious labor in which the forceps was not used. The fistula, at first, was a very large one, and was most skillfully closed by an excellent surgeon. A very small fistula, however, remained at each angle of the wound. These defied repeated operations on his part, and the case finally drifted into Dr. Goodell's hands. Twice the latter operated at his private hospital on these fistulæ, using the Goodman self-retaining catheter, but each time vesical and uterine tenesmus set in and the result was a failure. Both fistulæ were then burned with the actual cautery and one of them closed up, but the larger one resisted this treatment, as well as that by nitric acid. He then operated upon it a month ago for the third time, dispensing with the use of the catheter. The lady was instructed to pass her water before the desire was urgent. Neither vesical nor uterine tenesmus occurred. The stitches were left in for fourteen days, and union was complete. The third case was the result of a short labor, and the cause of the fistula was obscure, as the lady was attended by a midwife, who pulled and tugged away at something after the birth of the child. The late Dr. H. Lenox Hodge had operated five times upon it, closing all but a small fistula which lay at the junction of the neck of the bladder with the urethra. Dr. Goodell closed this fistula at the Hospital of the University, three weeks ago, with eight stitches, and, fearing that the catheter would interfere with the union, dispensed wholly with it. The success was complete.

From these cases, and from others which he had met with, Dr. Goodell was led to think that the catheter might, as a source of irritation, oftener be dispensed with very advantageously in the treatment of these fistulæ. He cited the practice of the late Dr. Simon, of Heidelberg, who was a very successful operator, and yet rarely resorted to its use. He also called attention to the fact that in these cases, and in the very great majority of the cases he had met with, the forceps had not been resorted to, showing that it was not the use of that instrument, but its neglect, or the delay in its use, that caused the mischief. In fact, he could not recall a case in which the lesion could be attributed to instrumental delivery. In the general experience of surgeons, very small vesico-vaginal fistulæ were harder to cure than moderate-sized ones. One reason for this was the fact that they were usually found in sites difficult to reach; and another, that the operator was unwilling to enlarge the small opening by bold incisions, and failed from too small a denuded surface. Including the one previously referred to, he had closed two of them by means of the actual cautery.

Dr. ALBERT H. SMITH remarked that these cases were of great interest. He had been taken by surprise when Dr. Simon announced his plan of treatment without the catheter, as he had been afraid of the strain on the stitches resulting from the accumulation of urine in the bladder. The presence of the self-retaining catheter must necessarily be a source of irritation and vesical tenesmus. The small holes in its bulb might become occluded by mucus or clot, and then it would act as a plug instead of a drain. In those cases in which the loss of substance in the vesico-vaginal septum had been very great, and the mucous surface of the bladder had been prolapsed into the vagina, the ca-

capacity of the bladder became small, and it must be emptied frequently or the tension on the stitches would be too great.

He had been gradually led to the conclusion that it would be better not to use the catheter after trachelorrhaphy and perineorrhaphy, unless called for by special circumstances. There were cases in which, in consequence of mental influence, or the effect of position, the patient could not pass her water for weeks after labor in which no injury or long or undue pressure had occurred.

Dr. R. P. HARRIS had recently operated for the restoration of a very long perinæum; the last stitch was almost on a line with the orifice of the urethra, and the nurse was not able to introduce the catheter. He placed the patient in a sitting position to pass her water, and used a male catheter, tied on the tube of a Davidson syringe, to wash out the vagina.

Dr. GOODELL was by no means a convert to treatment in this class of cases without the employment of the catheter. He had been too successful with it. He preferred the Goodman self-retaining instrument; but he always made certain that it did not impinge on the wound. He had recognized the influence of mind and of position on the ability to pass water, and he thought the use of ergot, so general before the third stage of labor, was one cause of the difficulty, as it was quite possible that it might cause a spasm of the urethral constricting fibers. He would like to dispense with the use of both catheter and syringe after perineorrhaphy, as he had found injuries to the anterior angle of the wound by the syringe and the fingers of the nurse while introducing the catheter. He had been in the habit of putting one stitch through the sound skin, above the denuded surfaces, to prevent this injury. In one case, recently, the Goodman catheter slipped out twenty-four hours after perineorrhaphy, and he did not replace it, the wound healing. He always used the catheter after trachelorrhaphy.

TWO OVARIAN TUMORS, ONE OF THEM OF DOUBTFUL CHARACTER.—The specimens were shown by Dr. GOODELL. The one of doubtful character was removed from an unmarried woman, aged twenty-seven, who had not menstruated for over a year. It was first discovered nine years ago, but gave no trouble until two years and a half ago, when ascites set in. She had been tapped fourteen times when Dr. Goodell first saw her. She was very thin, pale, and so weak as to keep her bed. He recognized a hard tumor floating in the ascitic fluid, giving the feeling of ballottement, and diagnosticated it as either a solid ovarian tumor or a pedunculated fibroid.

On the 18th of last April he removed it at the University Hospital, and found it to be a hard, solid, nodular tumor of the right ovary, with evidences of papillomatous degeneration. It had merely omental adhesions, and had a long, slender pedicle twisted many times on its axis. It was evident that the ascitic fluid was secreted directly from the tumor, and did not come from pressure on abdominal veins, or from irritation of the peritonæum.

The other cyst was removed also at the Hospital of the University, and on the same day, from a married woman, aged twenty-six, who noticed it two months after her marriage, and about four months ago. The cyst was as large as the adult head, and was apparently attached to the womb, which was drawn upward and gave a measurement of four inches. It was operated on early, because it caused great vesical disturbance. The lower portion of the cyst was found enveloped in the broad ligament close up to the womb, and had to be enucleated. It was this condition that gave the symptoms of uterine attachment. The cyst was that of the left ovary; but, as the right ovary also presented tokens of degeneration, it was also removed. Both women recovered promptly, although the first one had, on the third day, a severe attack of mumps, which ap-

peared to be prevailing in this city as an epidemic. The ascitic fluid, which was straw-colored and sirupy, was not examined microscopically.

Dr. M. O'HARA wished to know how Dr. Goodell could decide quickly between mumps and septic parotitis. He also spoke of the reflex action of the sexual organs as shown by the frequent occurrence of salivation during pregnancy. In a recent case of cancer of the rectum, the first symptom observed was excessive secretion of saliva.

Dr. ALBERT H. SMITH remarked that mumps was a very interesting and very perplexing disease. He had seen cases of extension of the disease, without retrocession, in adult women, to mastitis and oöphoritis, the swelling of the parotid gland being rapidly followed by the involvement of the sexual glands, the inflammation of the ovaries being accompanied by local peritonitis. A singular question was raised by the case of a young man who went to Florida directly after marriage, and, on the return trip by sea, experienced a severe attack of mumps. It was complicated by orchitis, the inflammation being of high grade, with great increase of temperature and rapid pulse. No atrophy of the testicles had occurred, but the union had been sterile, and there was no known fault on the part of the wife. The semen had not been examined microscopically to ascertain the presence of spermatozooids. The mastitis accompanying mumps had never, in Dr. Smith's experience, run into suppuration, but was accompanied by febrile action of a high grade. He had seen the ovary the original point of attack, the inflammation of the mammary gland being later. It was a marvel of pathology that this disease, which affected in childhood the salivary glands only, should, in adult life, affect the sexual glands also. He had never seen a case of atrophy of the testicles following mumps.

Dr. GOODELL recognized mumps in this case by his experience in two previous cases of mumps, with severe symptoms, in adults. The pulse did not become so frequent as in septicæmia, and the eye remained clear and did not acquire that glassy appearance so indicative of a fatal issue. Dr. Goodell had never seen the involvement of the breast and ovary. A peculiar relation between the sexual organs and the glands of the neck was shown by a habit of the Roman matron who measured the throat of her daughter before and after the night of the marriage, to ascertain if the young husband had properly performed his marital duties, and if they had been properly received.

HARD-RUBBER URETHRAL DILATORS.—Dr. ALBERT H. SMITH exhibited a set consisting of ten pieces with two handles, into which they could be screwed; the smallest bougie was twenty millimetres in circumference at the point, and twenty-eight millimetres at the largest part, the tapering in each bougie being eight millimetres, and a difference of six millimetres between each one and the largest circumference of the next in the scale. The largest one was eighty-two millimetres at the largest part, and would be useful as a rectal dilator. He had been very much surprised at a statement made by Dr. Emmet at the last meeting of the Gynecological Society in Boston, that dilatation of the urethra almost universally caused laceration, and was followed by permanent incontinence of urine. Dr. Smith had been in the habit of doing it frequently and fearlessly, without hesitation, not only in disease of the urethra and bladder, but for exploratory purposes and for removal of stone, as a step in the operation of anterior clytorrhaphy, that by means of a finger in the bladder he might judge of the thickness of the walls in denuding the vaginal surface and place his sutures satisfactorily. He had never had incontinence of urine to last over twenty-four hours from this procedure.

Dr. R. P. HARRIS had seen a large number of dilatations of the urethra without any bad effect. He would consider the method of Dr. Smith better than any other plan, as it would

make a perfectly even and uniform pressure on every portion of the urethra, with a very gradual action, free from the dangers incident to the opening of any form of instrument with blades.

Dr. GOODSELL was much obliged to Dr. Smith for exhibiting these instruments, and would get a set of them. He had entirely dropped Simon dilators, and had for some time been using his little finger as the best dilator. He had not had any trouble from laceration or incontinence. In one case in which he resorted to dilatation and treatment to the mucous surface of the bladder as a cure for cystitis following labor, incontinence remained for a long time, but gradually disappeared. He knew of laceration and incontinence in two instances resulting from the use of the thumb as a dilator. Dilatation alone was a good treatment for many cases of irritable bladder.

Dr. WM. H. PARISH narrated the case of a widow operated on by Dr. Goodell by dilatation for the relief of a very aggravated case of irritable bladder, the result of a gonorrhœa contracted years before from her husband, and which had been followed by cystitis. It was greatly relieved for several months, but not cured, by dilatation, but the relief was only temporary. The patient passed under the care of Dr. H. Lenox Hodge, who canterized the urethra by means of Paquelin's cautery. In consequence of the illness and death of Dr. Hodge, she came again under the care of Dr. Parish, who commenced treatment by the injection of a solution of nitrate of silver, very strong at first, but weaker on subsequent applications. The trouble had passed entirely away. There were two causes of fissure in dilatation: the first was too rapid expansion of the dilator; the second, changes in the mucous membrane, as from inflammatory action, particularly if caused by gonorrhœal poison.

Dr. CHARLES H. THOMAS had lately procured a set of nickel-steel instruments of about the same taper, and for the same purpose as those exhibited by Dr. Smith. The set consisted of sixteen pieces; each dilator tapered five mm. from the point to the largest circumference of the shank; they ranged from twenty-five to fifty mm. He had tried in some cases using every second instrument, making rises of three mm., but had found that the pain was increased by so doing. He had never known of a case of incontinence caused by dilatation, but had heard of such from the hands of two celebrated surgeons of this city. He thought dilatation to the size of the finger a good treatment for the relief of irritable bladder in connection with irritation of the urethra and neck of the bladder. He related the history of two cases in which this condition was complicated and made persistent by "sphincterismus" of the sphincter-ani muscle; dilatation of the urethra in these cases, although a benefit, did not cure the trouble, but when to this was added dilatation of the sphincter ani, so that two fingers could be introduced back to back, and a good dilatation secured, the patients were permanently cured.

Dr. B. F. BAER had practiced dilatation of the female urethra a number of times, and had had no instance of continued incontinence. He would, however, question the propriety of ever using a large-sized dilator, except for the purpose of removing a calculus from the bladder, and even in that case he thought it might be better to allow the stone in the grasp of the forceps to finish the dilatation than to use mechanical dilators to secure the full extent needed. In one instance incontinence lasted several weeks after dilatation, but final recovery was complete, solutions of carbolic acid having been applied in the mean time for the cure of an irritability of the bladder and urethra.

Dr. PARISH would like to hear from Dr. Smith respecting the indications for probable success in treatment by dilatation of the urethra for the relief of irritation of the bladder.

Dr. SMITH, in reply to Dr. Baer, remarked that no cavity of the body should ever be dilated beyond the actual necessities of the case; such a principle was unquestionable; but no form of

dilator could be worse than the irregularities and roughness of a calculus, increased in size as it would be by the grasping forceps, which would present but two points of contact with the urethra, and render laceration quite probable. In a patient recently under his care, he had reason to suspect the existence of papillomatous growths on the mucous surface of the bladder; he dilated the urethra, using the largest of Simon's dilators, and completing with a Molesworth dilator, expanded very slowly. He was able to evert the bladder through the urethra, and removed the vegetations by means of scissors. There was no laceration nor incontinence resulting from this procedure. The danger was in too great haste. In reply to Dr. Parish, he said that dilatation was usually resorted to for exploratory purposes, removal of stone, growths in the vesical wall, or to ascertain the thickness of the wall of the bladder, and to introduce a finger into that viscus to guide the sutures in plastic operations upon the vagina. Irritability of the neck of the bladder could generally be relieved by dilatation, but it sometimes failed to cure. Dr. Smith preferred hard rubber to plated metal as the material for the dilators; it was lighter in weight, was not liable to corrosion and was more easily kept clean. He thought the multiplicity of instruments in Dr. Thomas's scale a disadvantage, and that time was lost and irritation caused by introducing several instruments in place of allowing one to remain a longer time.

W. H. H. GITHENS, M. D., *Secretary.*

NEW YORK CLINICAL SOCIETY.

A REGULAR meeting was held May 25, 1883, Dr. FRANK P. FOSTER chairman for the evening.

FOREIGN BODY IN THE HAND.—Dr. ROBERT ABBE presented a triangular piece of plate glass, an inch and three quarters long



and half an inch broad, which he had removed from a man's hand under the following circumstances: Three days before the patient came under observation he had thrust his hand through a window, receiving a transverse incised wound on the palmar aspect of the wrist, dividing one of the flexor tendons. The wound was sewed up by the surgeon who first saw him. The hand was swollen and had an angry look, the temperature was elevated, and the whole set of symptoms suggested strongly the presence of a foreign body. The wound was reopened, and, after considerable probing, a piece of glass was discovered in the palm, about three fourths of an inch from the wound. It was removed with some difficulty by means of dressing forceps. The apex of the triangular piece of glass was toward the fingers, and this had prevented the patient from extending the fingers completely. Dr. Abbe called attention to the importance of determining positively, especially in injuries by glass, whether any foreign body was still present before sewing up wounds.

Dr. L. EMMETT HOLT mentioned the case of a boy who received a wound of the hand with a toy pistol. The wound was thoroughly cleansed, and it was thought all foreign bodies had been removed. It was dressed antiseptically. Extensive supuration followed; several counter-openings had to be made on account of the burrowing of pus, and it looked at one time as though he might have to lose the hand. After a month of waiting and exploring and poulticing, the boy brought back one morning a small bit of pasteboard, about two lines in diameter, which had been discharged spontaneously from one of the

openings. In ten days all the sinuses were healed, and he made a quick recovery. The case illustrated how extremely difficult it was at times to detect foreign bodies in wounds, even though we might be almost certain that they were present.

PROLONGED TAXIS FOR THE REDUCTION OF HERNIA.—Dr. ABBE also related a case of hernia which he had reduced without ether, after prolonged taxis lasting three quarters of an hour. The hernia had been down for four months, and was irreducible by the patient and by several surgeons who had previously seen the case. There were no symptoms of strangulation. His experience in this, and in quite a number of similar cases, had led him to place a very high estimate upon prolonged taxis. He had often worked half an hour without any apparent change in the tumor, and then in a few minutes had the whole mass slip back quite easily. He applied the same method to all cases of strangulated hernia, except those with acute symptoms. If taxis were carefully employed, any irritation which it produced he thought could be allayed by subsequent rest and the application of ice. He had not found elevating the hips during taxis of any service unless the patient were under ether. The constrained position usually made the parts more tense than before. Position was undoubtedly valuable when the patient was to be left for some hours. This was sufficient in many cases for reduction.

Dr. J. E. WINTERS asked whether cold or hot applications had been found most valuable by members of the society in such cases. Personally he much preferred the use of cold. This was corroborated by the experience of all present.

Dr. W. H. KATZENBACH said he had recently seen a case in which numbness and tingling, and a sensation of walking upon cushions, had apparently been produced by the wearing of a tightly-fitting truss for a double inguinal hernia. The patient was a gentleman past middle life. The symptoms had existed about four years—in fact, ever since the truss was applied. It had always given him more or less pain. He had been told that he had locomotor ataxia. Examination failed to reveal any anæsthesia or hyperæsthesia; the tendon reflexes were normal. No other symptoms were elicited. The patient was not worse now than formerly.

Dr. WINTERS thought that, had the symptoms mentioned been produced by the truss, they ought to have grown worse in four years' time. He inquired if the posterior aspect of the legs was affected. It was difficult to see how pressure upon the inguinal and anterior crural nerves could cause symptoms in the soles and posterior aspects of the legs, which were supplied from the sciatic.

Dr. KATZENBACH admitted that his examination had not been a very thorough one, and he was unable to answer definitely the question regarding the localization of the numbness and tingling.

PSYCHICAL DISTURBANCES WITHOUT APPARENT CAUSE.—Dr. A. A. SMITH related the following two cases as illustrations of a series of seven or eight, closely resembling each other, which had recently fallen under his observation: One patient, a lady of forty-seven, past the change of life, suddenly, and without assignable cause, became exceedingly nervous, very irritable in disposition, and easily moved to tears. Her sleep was very much disturbed, and there was almost complete anorexia. There were no pains, headache, or constipation. Nothing pointed to any disturbance of the stomach or liver. There was great mental depression, and a constant dread that something serious was about to happen. The patient had been sensible and healthy previously, except a pelvic cellulitis, which she had had three years before.

The second patient was a widow of forty, of good constitution, who had lately had loss of flesh and of appetite, poor as-

similation, and vomiting. Her extremities were cold much of the time, she tired easily on exertion, complained of spots of numbness frequently after rising, and apprehended paralysis. She had no pain. She was easily moved to tears, at which she became very angry with herself. She perspired easily. She had always slept well before, but now only two or three hours during the night. As in the previous case, no assignable cause was found. The two cases did not occur in the same family or among friends. He was at a loss to explain these cases unless by some possible atmospheric influence—such, perhaps, as that which early in the season had produced so much pneumonia, or physical depression.

Dr. ABBE thought we were not enough on the lookout for such epidemic influences. He had been much interested in studying diarrhoeas occurring epidemically in hospital wards from time to time and lasting a day or two. He said the mucous membranes, being the most exposed parts, were most likely to suffer from atmospheric influences. He mentioned a case occurring in a lady of stoical habit who from an ordinary cold and bronchitis suffered from great prostration for a day or two beyond what would be explained by the physical symptoms. She shed tears copiously.

The CHAIRMAN alluded to atmospheric conditions affecting other diseases with which we were more familiar. Erysipelas was much the most frequent from the middle of April to June. The majority of pelvic inflammations occurred in mid-winter; perhaps we had no better term to apply to these influences than the *genius epidemicus* of the old writers.

Dr. J. H. EMERSON spoke of the frequency of epidemics of catarrhal conjunctivitis lasting a week or more.

AN ANOMALY OF THE STUMP OF THE UMBILICAL CORD.—Dr. ABBE related the following case: Three weeks before he had delivered a primipara, aged sixteen years. The cord was tied as usual, and in a few days sloughed except about three fourths of an inch of it. This still remained, resembling a small penis in appearance. It was healthy, and showed no tendency to come away. It was covered by integument and capped by a few small erosions. It was a little constricted at its attached end. He was certain that no intestine was included in it. A little hæmorrhage occurred on the third or fourth day, but did not change the size. The mass did not pulsate. He had decided to ligate it.

No member present could recall having seen or heard of a similar case.

UNUSUAL EFFECTS FROM THE BROMIDES.—Dr. E. G. JANEWAY mentioned a case in which hallucinations of sight had been produced by bromide of potassium. The patient was a man of forty-six years, who had suffered from intense headaches for three months. There was no history of syphilis. He had taken bromides before, and said they always disturbed his vision. He was ordered fifteen grains of bromide of potassium three times a day, and twenty grains at night. It was combined with the iodide in moderate doses. After a week the patient complained of seeing a third person in the room, and of other hallucinations of a similar nature. The bromide was then stopped and the iodide continued. In two days all the symptoms were gone. The dose of the iodide was doubled afterward, but the symptoms did not recur. Dr. Janeway called attention to the fact that delirium was often referred to the disease, when in reality it was from the drugs employed in treatment. This was noticeably the case with salicylic acid or salicylate of sodium, morphine, and wintergreen.

Dr. WINTERS had seen a case in which hallucinations of sight had been caused by immense doses of the bromides. They had preceded the other symptoms of bromism. The patient took at one time six drachms in twenty-four hours. The dose

was reduced to ninety-five grains a day, when œdema of the lungs developed, but he finally died of heart-failure.

Dr. Winters mentioned another case in which forty-grain doses three times a day had produced the hallucination of threads hanging all about the patient, at which he was constantly picking.

Dr. JANEWAY stated that there was no hysterical element in the case first mentioned, and that there were no other symptoms produced by the drug except a degree of apathy. He had seen now four cases in which the bromides had produced death when given to excess.

TUMORS OF THE STOMACH.—Dr. JANEWAY related two cases—one of cancer, and one of lympho-sarcoma of the stomach—which had presented some quite anomalous and obscure symptoms. In the case of cancer, the predominant symptoms were neuralgic pains in the arms and legs, which were found on autopsy to depend on cancer of the vertebræ and dura mater. This patient also presented a tumor under the left lobe of the liver, which pulsated and gave a double murmur. The usual symptoms of gastric cancer were absent. There was no vomiting. The tumor was found situated at the lesser curvature. It was not ulcerated, and caused no stenosis. This was the fourth case of cancer which he had seen that had given rise to a pulsating tumor and a double murmur. The tumor pressed upon the aorta and caused stenosis. The first murmur he thought was due to the systolic wave, and the second to the diastolic wave.

In the case of lympho-sarcoma the prominent symptoms were neuralgic pains in the legs. The tumor occupied about the same site as the former one, and involved likewise the retroperitoneal glands and psoas muscle, to which latter fact the pains were due.

L. EMMETT HOLT, M. D., *Secretary.*

Miscellany.

THE AMERICAN DERMATOLOGICAL ASSOCIATION.—The seventh annual meeting will be held at the Sagamore House, Green Island, Lake George, on Wednesday, Thursday, and Friday, August 29th, 30th, and 31st. Papers are announced as follows: Dr. Piffard: Treatment of Acne. Dr. Hyde: A Study of the Coincidence of Syphilitic and Non-syphilitic Affections of the Skin. Dr. Graham: General Exfoliative Dermatitis. Dr. Stelwagon: Impetigo Contagiosa. Dr. Robinson: Alopecia Areata. Dr. Duhring: 1. On the Value of a Lotion of Sulphide of Zinc in the Treatment of Lupus Erythematosus. 2. Report of a Case of Ainhum with Microscopic Examination. Dr. Atkinson: A Case of Multiple Cachectic Ulceration. Dr. Sherwell: 1. Pseudo-psoriasis of the Palm. 2. Malignant Papillary Dermatitis. Dr. Bulkley: 1. A Hitherto Undescribed Vegetable Parasite found on the Human Skin. 2. A Clinical and Experimental Study of Pruritus. Dr. Van Harlingen: Experiments in the Use of Naphthol. Dr. Fox: A Trip to Tracadie. The President, Dr. Taylor: 1. Peculiar Changes observed in the Non-ulcerating Tubercular Syphilide. 2. Certain Appearances of the Initial Lesion of Syphilis at its Beginning.

THERAPEUTICAL NOTES.—*Action of Mixtures of Air and Vapor of Chloroform; a New Method of Anæsthesia.*—M. Paul Bert ("Gazette Hebdomadaire de Médecine et de Chirurgie," July 6, 1883) has found that, if a dog be made to breathe a mixture of 4 grammes of chloroform, vaporized in 100 litres of air, the animal remains conscious throughout the whole of the experiment, which was prolonged in one case to a period of nine hours and a half. In this case the rectal temperature fell to 35° C. [95° F.]. With a mixture of 6 grammes of chloroform vaporized in 100 litres of air, death took place in about seven hours, with a temperature of 31° C. [88° F.]. Consciousness

remained throughout, though it was impaired, especially during the last hours, when the animal was very cold. With a mixture of 8 to 100, insensibility of the skin and even of the cornea took place, very gradually, however, and after a period of excitement. Death occurred at the end of six hours, the temperature being reduced to 30° C. [86° F.]. With 10 to 100, insensibility supervened in a few minutes. The sleep was absolutely quiet, and death resulted without any stage of excitement, in from two hours to two and a half. The temperature was then from 35 to 33° C. [95 to 91.5° F.]. With 12 to 100, speedy insensibility without excitement; death in an hour and a quarter; temperature 35° C. [95° F.]. With 14 and 16 to 100, death in three quarters of an hour, temperature, 38° C. [100.5° F.]. With 18 and 20 to 100, death in half an hour. With 30 to 100, death in a few minutes. In all these experiments tracheotomy had been performed upon the animal. The chloroform was perfectly pure.

The experimenter calls particular attention to the following facts:

1. Whether death supervened quickly or slowly, the heart always continued to beat after the cessation of the respiratory movements.
2. Even after an anæsthesia of several hours, no chloroform appeared in the urine.
3. When the proportion of chloroform was very small, an enormous amount of it was inhaled without causing any objective phenomena except the lowering of the temperature.
4. With a slightly greater proportion of the anæsthetic, life was slowly destroyed. There was great lowering of temperature, but consciousness persisted until life was extinct. Furthermore, the chloroform acted only on the nutritive processes, probably by producing torpor of the ultimate cells, as the cells in beer were made dormant in the experiments of Claude Bernard.
5. With still greater proportions of the anæsthetic, when unconsciousness comes on quietly, death is always the result of the continued inhalation of the chloroform mixture. The stronger the mixture the more quickly does death take place, and the less the temperature is lowered. A dog was made to inhale a mixture of 12 grammes of chloroform to 100 litres of air. At the end of some minutes, when he was well anæsthetized, he was given a mixture of 8 to 100. This, which if used from the beginning would cause unconsciousness very slowly, and only after a stage of much excitement, was quite sufficient to continue the action of the stronger mixture. As it is not fatal unless administered a very long time, it rendered it possible to continue the anæsthesia perfectly for more than three hours without any danger to life, and without embarrassing the respiration or circulation. The temperature alone was affected. This is a very simple proceeding, and requires nothing but the use of two caoutchouc bags and two gasometers.

Before these facts are applied by surgeons, it remains to be determined of what strength anæsthetic mixtures should be made, to produce on human subjects the same effects as those in the foregoing series of experiments upon dogs.

Biniodide-of-Mercury Ointment as a Remedy for Acute Goitre.—Surgeon-Major Albert A. Gore, of the British Army in India ("Dublin Journal of Medical Science," June, 1883), reports the successful treatment of thirty cases of acute goitre by the biniodide-of-mercury ointment. The patients were all native soldiers. They were subjects of bronchocele while stationed in the foothills of the Himalaya mountains. The ointment was rubbed in for about ten minutes, the enlarged gland being well exposed to the sun or to a brisk fire during the inunction. The average duration of treatment was about twenty-three days. In ordinary cases, a single application, if properly made, was sufficient. Sometimes subsequent applications were required. There were no cases that refused to yield to treatment.

Crotalus as a Remedy for Malignant (Hæmorrhagic) Scarlatina.—Dr. John W. Hayward, of Liverpool, England, has come to the conclusion ("Lancet," July 14, 1883) that crotalus is a most valuable remedy in those malignant cases of hæmorrhagic scarlatina to cope with which there has been hitherto no adequate medicinal agent. After waiting to test the drug with great care, he has reported two very virulent cases which were successfully treated by him. In one case the patient was moribund when the crotalus was resorted to, she having grown steadily worse under all previous treatment. The mode of administration was as follows: The cuticle was removed from about the throat with a cantharides blister. To the exposed surface a compress sprinkled with

crotalus was applied, and a dose dissolved in a teaspoonful of water was dropped on the tongue every half-hour. The beneficial effects were apparent almost immediately. The retching, which had before been uncontrollable, ceased at once. Gradually the stupid lethargy, broken only by low, weak moaning, changed to a more natural condition of somnolence; the breathing became less labored, irregular, and sighing. The pulse, which had been 160 and scarcely perceptible, fell within twenty-four hours to 120; and all its characteristics were improved. The rash, which had been brown, rough, scanty, and but faintly visible, came out freely on the body and legs, and was of a purple color. The head, previously thrown upward and backward, assumed a more natural position. In the course of twelve hours more the rash brightened, the inflammation and oedema of the tonsils and fauces, which had entirely prevented swallowing, abated so that drinking was accompanied with but little difficulty or pain. The respiration was almost normal. The pulse was 100, and was gaining in force and fullness. A favorable prognosis was given, and the progress was so rapid that the patient was well within nine days of the attack. She was taken sick on the 5th ult., and nearly dead on the 7th; crotalus treatment was begun on the morning of the 7th; it rallied her almost immediately; the recovery was so rapid that a favorable prognosis was given on the 8th, and the patient was well on the 14th.

Dr. Hayward states that this case is not an exceptional one. He has witnessed "over and over again" the marked power exercised by crotalus in these malignant cases of hæmorrhagic scarlatina. He believes that it arrests the blood-poisoning which occasions the disease.

Cascara Sagrada for Constipation.—R. A. Douglas Lithgow, LL. D., M. R. C. P. Ed. ("British Medical Journal," July 14, 1883), warmly advocates the use of *Cascara sagrada* as almost a specific, under favorable conditions, for chronic constipation. It is of special value in cases characterized by torpidity of the liver and an atonic condition of the stomach and bowels. It seems to act as a tonic to the pneumogastric and sympathetic supplies of the *primæ viæ*, and the associated viscera. It thus corrects defective or perverted biliary and intestinal secretions, and relieves adynamic conditions of the nervous and muscular forces of the digestive apparatus. It will often tone and regulate the alimentary tract and its appendages when all other remedies fail. *Cascara sagrada* is also of special service when chronic constipation is associated with hæmorrhoids. It relieves congestion of the portal circulation and venous congestion of the stomach and intestines generally; moreover, instead of irritating, as many cathartics do, it exercises a soothing effect upon the rectal mucous membrane. In those troublesome cases in which habitual constipation is complicated with flatulent dyspepsia—vexatious alike to patient and practitioner—it is generally followed by highly gratifying results. The writer knows "of no therapeutic agent which is altogether so reliable and satisfactory in this numerous class of cases."

Small doses, frequently repeated, are more beneficial usually than large doses. To begin with, ten or fifteen drops should be given two or three times a day, either before, with, or immediately after meals. In a week, if there be little or no improvement, the dose should be increased until the bowels have been freely relieved, when it may gradually be decreased in amount and frequency, until healthy intestinal secretions and increased peristaltic action restore the alimentary canal to its normal condition. The dose for a child a month old is from two to five drops. In the exceptional cases in which it causes some griping the dose may be decreased, or the drug may be combined with a suitable antispasmodic. Moreover, the intelligent physician may often advantageously combine with it lactopeptin, dilute hydrochloric or nitric acid, nux vomica, aromatic syrups, etc.

[The preparation used by Dr. Lithgow was the fluid extract made by Messrs. Parke, Davis & Co.]

THE INTERNATIONAL MEDICAL CONGRESS OF 1884.—The president and secretary-general send us the following communication:

"Reminding you that the Eighth International Medical Congress (according to the notice already published some months ago in the medical journals) will be held in Copenhagen from the 10th to the 16th of August, 1884, we have the honor of communicating to you that the General Organizing Committee, formed for the preparatory work, is

composed of the following members, living either in or near Copenhagen: *President*: Professor Dr. P. L. Panum. *Secretary-General*: Professor C. Lange. *Secretaries*: Dr. O. Bloch, Dr. C. J. Salomonsen, and Surgeon-General Joh. Møller. *Honorary Treasurer*: Professor Dr. E. Hansen Grut, besides the presidents of the special committees of the *Section of Anatomy*: Professor Chievitz. *Physiology*: Professor Dr. P. L. Panum. *General Pathology and Pathological Anatomy*: Professor Dr. C. Reisz. *Medicine*: Professor Dr. F. Trier. *Surgery*: Professor Dr. Holmer. *Hygiene and State Medicine*: Dr. E. Hornemann. *Military Surgery and Medicine*: Director-General of the Medical Department of the Army Salomon. *Mental and Nervous Diseases*: Professor Dr. Steenberg. *Obstetric Medicine and Surgery, Gynecology*: Professor Dr. Stadfeldt and Professor Dr. Howitz. *Diseases of Children*: Professor Dr. Hirschsprung. *Ophthalmology*: Professor Dr. E. Hansen Grut. *Diseases of the Skin and Syphilis*: Professor Dr. Haslund. *Diseases of the Ear*: Dr. W. Meyer. *Diseases of the Throat*: Dr. W. Meyer.

"The special committees formed for the aforesaid sections have, when they found it useful, completed their number by members living outside Copenhagen, partly in Denmark, partly in the other Scandinavian countries. In order that the meeting of so many distinguished medical men, whom we hope to see on this occasion, may be as advantageous as possible, the organizing committee, following the example of the later congresses, will communicate with distinguished men of different branches and of different countries, in order to prepare a programme. This programme, as well as the rules, will be forwarded to those of our colleagues who we suppose take an interest in the work of the Congress, and who might be inclined to participate in it. In order that the programme may be ready as soon as possible, we should be pleased if communications referring to the work of the Congress were sent to the . . . secretary-general before the 1st of October next, so that it may be possible for us to have regard to them in arranging the definite programme. The programme and rules will be forwarded as soon as possible to every one qualified to participate in the Congress who, within the limited time, has announced to the secretary-general his interest in the Congress, and his eventual intention of participating in it, if possible also which section he chiefly intends joining."

A PRIZE FOR THE ARTIFICIAL CULTIVATION OF VACCINE.—A London correspondent of the "Union médicale" states that the Grocers' Company, of London, offers a prize of £1,000, open to universal competition, to the discoverer of a method by which vaccine may be cultivated in an indifferent medium. The process must allow of the indefinite multiplication of the virus by successive generations, and the product of each generation must have the properties of natural vaccine lymph, so far as the time allowed may suffice to determine. A description of the process, written in English, must be submitted before December 31, 1886, and the prize will be awarded as soon after that date as possible. Further information may be had by addressing the clerk of the Grocers' Company, Grocers' Hall, London.

THE DISINFECTION OF MAIL MATTER AT MARSEILLES.—According to a writer in the "Union médicale," the laboratory used for disinfecting the mail matter brought to Marseilles from an infected port consists of a close room provided with a huge table for holding the contents of the mail-bags, previously untied. The postal agents of the vessel attend to this preliminary operation, and then withdraw to the ship or to the lazaretto, having hermetically closed the openings of the fumigating chamber. Phenicated or chlorinated vapor is then forced into the latter for a suitable length of time, after which the city post-office employees enter it by another door, after it has been aired, and fill the purified bags. Thus there is no communication between the quarantined officials and those of the town.

THE TREATMENT OF HAY FEVER.—Mr. W. F. Phillips ("British Medical Journal") writes: It is just over five weeks since a lady placed herself under my care for the treatment of hay fever, or summer catarrh—a very much better name. She had suffered severely for many years, and sometimes from the end of May to near the end of July with little or no intermission unless she kept indoors. Her mother, it is worthy

of remark, was very sensitive to the odor of certain flowers, and was affected by some of them even to the extent of fainting. She was not subject, however, to summer catarrh. Knowing how exceedingly unsatisfactory is the treatment recommended and practiced for this disease, as is sufficiently evident from the recent communications to the journal on the subject, I sought for rational indications that might guide me to the selection of a remedy. I thought of the neurosis that seems to underlie most cases of this kind, and to constitute the essential cause or predisposition on which the disease depends; of the characteristic symptoms of the malady: the injection of the conjunctiva, the hyperæmia and hyperæsthesia of the nasal cavities, the excessive secretion of tears and mucus; and then I bethought me of a drug whose physiological action might indicate the possession of the power to control such symptoms. Belladonna was the drug that suggested itself at once, and I determined to give it a trial, all the more hopefully because I remembered how strikingly useful on similar indications, and by a parity of reasoning, I had often found it in ordinary conjunctivitis and simple catarrh. I began with the following prescription: $\mathcal{R}$ Succ belladonnæ, $\pi\chi\chi\text{iv}$; aquam ad $\mathfrak{z}\text{ij}$. Misce. A teaspoonful to be taken every hour till relief is obtained. The medicine was taken without the production of any undesirable effect, and with very marked advantage indeed—an advantage that became still more evident and unmistakable, both to the patient and myself, when the dose was increased from one minim to one and a quarter (half a drachm in three ounces). Once, too, when the eyelids were especially tender, the patient was advised to use the mixture as a lotion to the affected parts, and this local application was found to be a most useful addition to the internal administration of the remedy. Repeatedly, when the symptoms of an attack had been allowed to begin, the patient found prompt relief after a few doses of the drug, the catarrhal affection disappearing first, and then the asthmatic; and, on taking it regularly every day after the malady had been subdued, she has found to her delight that she can take her walks abroad through blooming grass and flowers without the least protection or precaution—a thing she had not been able to do for years before. The patient, remembering, no doubt, the failure of past treatment, pronounces the remedy “a great success”; but, however satisfactory the case may be, it is, as far as I know, a solitary one, and therefore stands in need of confirmation and support.

THE RUSH MEDICAL COLLEGE, OF CHICAGO.—The “Cincinnati Medical News” states that a hospital, of a capacity of about fifty beds, is to be built on ground adjoining the college building.

ARTOCARPUS INCISA IN THE TREATMENT OF ERYSIPELAS.—According to Surgeon C. H. White, of the navy, the natives of Tahiti treat erysipelas by coating the inflamed part with the juice of the *Artocarpus incisa*, which acts like collodion.

ARMY INTELLIGENCE.—*Official List of Changes of Officers serving in the Medical Department of the United States Army from August 4, 1883, to August 11, 1883.*—**MAGRUDER, DAVID L.**, Lieutenant-Colonel and Surgeon. Leave of absence extended one month. S. O. 89, Military Division of the Missouri, August 4, 1883. — **MCPARLIN, THOMAS A.**, Lieutenant-Colonel and Assistant Medical Purveyor. Relieved from duty in charge of the purveying depot in San Francisco, California, to take effect September 1, 1883, and will then proceed to New York city and relieve Assistant Medical Purveyor Ebenezer Swift of the charge of the purveying depot in that city. Assistant Medical Purveyor McParlin will transfer all funds and public property in his possession to Medical Storekeeper Henry Johnson, who, until further orders, will perform the duties of acting assistant medical purveyor at the purveying depot in San Francisco. Par. 5, S. O. 183, A. G. O., August 9, 1883. — **FORWOOD, WILLIAM H.**, Major and Surgeon. To proceed to Fort Washakie, Wyoming, and Fort Ellis, Montana, on public business and return. S. O. 87, Military Division of the Missouri, August 2, 1883. — **WOODWARD, JOSEPH J.**, Major and Surgeon. Leave of absence, granted on account of sickness by S. O. 34, extended six months. S. O. 179, A. G. O., August 4, 1883. — **BYRNE, CHARLES B.**, Captain and Assistant Surgeon. Relieved from duty at Fort Craig, New Mexico, and assigned to duty at Fort Lewis, Colorado. Par. 3,

S. O. 161, Department of the Missouri, August 6, 1883. — **LATDERDALE, JOHN V.**, Captain and Assistant Surgeon. Granted leave of absence for two months, to take effect on or about the 15th inst. Par. 2, S. O. 90, Department of the Missouri, August 6, 1883. — **BANISTER, JOHN M.**, First Lieutenant and Assistant Surgeon. Relieved from duty in the Department of the Missouri and assigned to duty in the Department of the East. Par. 5, S. O. 183, A. G. O., August 9, 1883. — **CARTER, WILLIAM F.**, First Lieutenant and Assistant Surgeon. Relieved from duty in the Department of Texas, and assigned to duty in the Department of the East. Par. 5, S. O. 183, A. G. O., August 9, 1883. — **KANE, JOHN J.**, First Lieutenant and Assistant Surgeon. Relieved from duty in the Department of the Missouri and assigned to duty in the Department of the East. Par. 5, S. O. 183, A. G. O., August 9, 1883. — **OWEN, W. O., Jr.**, First Lieutenant and Assistant Surgeon. To proceed from Vancouver Barracks to Fort Walla Walla, Wyoming Territory, and report to the commanding officer of the latter post for temporary duty. S. O. 101, Department of the Columbia, July 27, 1883.

NAVAL INTELLIGENCE.—*Official List of Changes in the Medical Corps of the Navy during the week ending August 11, 1883.*—Passed Assistant Surgeon J. D. Gatewood, orders to the Trenton revoked and ordered to the Kearsarge. — Assistant Surgeon Horace B. Scott, detached from the Receiving Ship Franklin, at Norfolk, on the 30th inst., and ordered to the Trenton, September 1st. — Passed Assistant Surgeon A. A. Austin, detached from the Richmond, and waiting orders.

MARINE-HOSPITAL SERVICE.—*Official List of Changes of Stations and Duties of Medical Officers of the United States Marine-Hospital Service, April 1, 1883, to June 30, 1883.*—**BAILHACHE, P. H.**, Surgeon. To examine officers and cadets of the Revenue Marine Service, April 2, May 28, and June 4, 1883. To proceed to New York, N. Y., to make arrangements for the care of seamen, April 30, 1883. To proceed to Chattanooga, Memphis, St. Louis, Cairo, Evansville, Louisville, Cincinnati, Gallipolis, Wheeling, and Pittsburgh, as inspector, June 23, 1883. — **MILLER, T. W.**, Surgeon. Detailed as president, Board of Examiners, May 15, 1883. Detailed as member of board for the physical examination of cadets of the Revenue Marine Service, May 15, 1883. — **WYMAN, WALTER**, Surgeon. Detailed as member of boards for the physical examination of officers and cadets of the Revenue Marine Service, May 1, 15, and 28, 1883. Detailed as member Board of Examiners, May 15, 1883. — **MURRAY, R. D.**, Surgeon. To proceed to Pensacola, Fla., and take charge of Quarantine Service, May 21, 1883. — **GASSAWAY, J. M.**, Surgeon. Granted leave of absence for ten days, April 21, 1883. Detailed as recorder Board of Examiners, May 15, 1883. — **SMITH, HENRY**, Surgeon. Granted leave of absence for thirty days on account of sickness, June 14, 1883. — **FISHER, J. C.**, Passed Assistant Surgeon. Detailed as member of boards for the physical examination of officers of the Revenue Marine Service, May 1 and June 4, 1883. — **COOKE, H. P.**, Passed Assistant Surgeon. Granted leave of absence for thirty days, May 15, 1883. — **O'CONNOR, F. J.**, Assistant Surgeon. Relieved from duty at Detroit, Mich., and assigned to temporary duty at Boston, Mass., May 10, 1883. — **GUITÉRAS, JOHN**, Assistant Surgeon. Granted leave of absence for thirty days, without pay, April 3, 1883. — **ARMSTRONG, S. T.**, Assistant Surgeon. To proceed to Memphis, Tenn., for temporary duty, May 21, 1883. — **BENNETT, P. H.**, Assistant Surgeon. Granted leave of absence for thirty days on account of sickness, June 26, 1883. — **AMES, R. P. M.**, Assistant Surgeon. Granted leave of absence for fourteen days, April 3, 1883. — **DEVAN, S. C.**, Assistant Surgeon. Detailed as medical officer, Revenue steamer Corwin, during cruise in Alaskan waters, April 16, 1883. — **BEVAN, A. D.**, Assistant Surgeon. To proceed to Detroit, Mich., for temporary duty, June 11, 1883. — **GLENNAN, A. H.**, Assistant Surgeon. To proceed to Norfolk, Va., for temporary duty, June 26, 1883. *Appointments.*—The following candidates, having passed the examination required by the Regulations, were appointed Assistant Surgeons by the Secretary of the Treasury, June 6, 1883: **ARTHUR D. BEVAN, M. D.**, of Illinois, and **ARTHUR H. GLENNAN, M. D.**, of the District of Columbia.

Lectures and Addresses.

A LECTURE ON

THE PHYSICAL BASIS OF PHYSIOLOGY.

DELIVERED AT THE BELLEVUE HOSPITAL MEDICAL COLLEGE,

By W. H. ALLCHIN, M. B., F. R. C. P., F. R. S. E.

LECTURER ON PHYSIOLOGY AND PATHOLOGY AT THE WESTMINSTER HOSPITAL MEDICAL SCHOOL; PHYSICIAN TO THE WESTMINSTER HOSPITAL, LONDON.

GENTLEMEN: Some ten days ago, when the opportunity of addressing you was given to me, I will confess to having accepted the offer with feelings of gratification, and to having been much flattered by the proposal. To-day, with the recollection of the eloquent and masterly lecture delivered yesterday by Professor Flint, I feel no small consternation at the position in which I have allowed myself to be placed. For, though not unaccustomed to lecture, it has not been my privilege hitherto to meet so large a class as I see now before me, nor to come into direct contrast with so able and graphic a teacher as he whose place I occupy assuredly is. The lucid and telling manner in which yesterday the structure of the liver was described, I have never heard the like of, and, though familiar to you, I congratulate you, gentlemen, on having such a master, whose fame has reached us in my country, but whose powers as a teacher I only yesterday fully realized.

To occupy your time with a lecture on the regular subjects of the physiological course would be absurd and impertinent in me, and would probably and rightly be resented by you. It would be depriving you of the rich eloquence, and forcible exposition of your professor, and offering you in its place, for no good reason, a weakly substitute. When, therefore, I turned over in my mind what I should say to you, I was somewhat perplexed as to how I should comport myself with the least discredit, until I remembered that there was yet another side; that, besides the hard facts and records acquired by patient observation and experiment, there were certain inferences that might be drawn, certain principles which might be indicated, of the greatest value if properly applied. In thus thinking I was not altogether unmindful of the charge of presumption that I was thereby possibly laying myself open to. Scientific men are very properly shy of principles and those who propound them, and it only comes to him who, like Charles Darwin, had carefully observed and recorded facts, to be listened to with respect when he enunciates a general principle. Nevertheless, speaking as a teacher of physiology for the past eighteen years, I am distinctly of opinion that the occasional expression of the principles, however provisional they may be, that seem to connect a number of ascertained facts together is of benefit to the student. For it must not be forgotten that physiology is but one of the many subjects that engage the student's attention in his too short course, and anything that serves to give coherence to his knowledge of the isolated facts is of positive advantage to him, provided he clearly accepts the theories as being open to amendment

or contradiction, and does not mistake them for absolute truths.

In a science like physiology, which, though perhaps out of its infancy, is in a very incomplete state, but at the same time is rapidly progressing, a good deal of allowance has to be made for the way of looking at things, and more is wanted by the worker at his subject than the mere knowledge of the facts obtained by observation or experiment. It is requisite that he have a habit of mind, that nothing but time will give, accurately to appreciate and place the information so obtained. Especially, as it seems to me, also is this the case with those who, after the too brief study of physiology which the curriculum compels, enter as physicians on the practical application of its truths in abnormal conditions. How desirable, then, is it that some prominence should be given to these principles in the ordinary course of lectures on the subject! Throughout life the problems of physiology present themselves to the medical man, long after the facts that he has gathered in the lecture-room and from his text-book are forgotten. I propose, then, to occupy your time to-day with the contemplation of certain theoretical considerations. Partly for the reasons I have given of what I consider the value of such a course, and partly because of the exceptional character of my appearance before you, I would propose to treat of some subject that may be fairly completed within the time at my disposal.

It is not my intention to contribute to the positive knowledge of physiology, that is so forcibly and graphically put before you by your teacher, but rather to ask you to look at some of that knowledge from a point of view that I venture to think may be somewhat new to you, and yet worthy of your attention; and, while I shall be very elementary, I shall hope to be suggestive. Not so many years ago, and quite within my recollection, when there was gradually yet widely developing that method of scientific inquiry and investigation which obtains among us now, physiology with its really small array of facts, and hampered with most obstructive doctrines, was looked at, in common with other branches of biological science, from a vague and uncertain stand-point, and with only the slightest appreciation that the same broad and general principles were underlying the phenomena presented by both animate and inanimate objects. Time was, and not so long ago either, when a living thing, whether animal or plant, was regarded, except, perhaps, by very few, and by them most imperfectly, as wholly inexplicable and mysterious in its action, not subjected to the same laws as govern inanimate matter, and not to be the object of experiment and observation similar to those applied to the investigation of the properties of non-living substances. There was a sort of half-expressed idea that life was altogether apart from other natural phenomena, and that the beings which manifested it were subject to special laws of their own, from which the rest of the world was free, and which it was impossible and even wrong to inquire into. I am not sure that the idea does not still lurk among us. To my mind, one of the most important advances made in natural science lately has been the steady

recognition that living beings are to be interpreted in their activities by the same fundamental principles that explain the manifestations presented by objects that do not live; or, in other words, that, when investigating the functions of an animal or plant, we are to recognize that many of those functions are identical with the properties that we find associated with materials that do not form, and have never formed parts of living things; and that the peculiarly characteristic functions of living things (to which I can see no objection to apply the term "vital," as indicating their limitation to objects we call living) are manifestations of energy connected with a certain peculiar form of matter, and may or may not be correlated to the so-called physical forces.

This placing, so to say, of physiology—this recognition of its position and relationship to other sciences—this rendering it amenable to the same universal principles, is, I can not help thinking, an achievement of very recent years that is quite worthy to rank with the doctrines of the "correlation of the physical forces" and "evolution," though it has not been associated so distinctly with the name of any particular worker as those two grand declarations have been.

Setting aside metaphysical speculations, the cosmos presents itself to us in two aspects, or, if you please, we are conscious of possessing two fundamental conceptions of the universe, to which we apply the terms "matter" and "force." We only appreciate the one through the other; we can not conceive of matter apart from the properties it displays, which properties—such as hardness, elasticity, rigidity, heat, and the like—are manifestations of force, apart from the material through which it is evolved. To this primary conception are added certain hypotheses, which, though incapable of direct proof, afford the most satisfactory explanation of most of the phenomena of the material world, and are accepted as forming the fundamental data upon which all experimental science is based.

Foremost among these hypotheses is the assumption that matter is absolutely indestructible; and, though capable of undergoing the widest range of alteration in condition, as expressed by the terms solid, liquid, and gaseous, and of entering into the most varied combinations, which may be again and again decomposed and rearranged, it is strictly limited in quantity, and is not subject to addition by creation. That matter should be removed out of existence is, with our present views, unthinkable, though daily experience shows us that it may undergo almost endless change in condition.

Another and most important theory is, that matter is constituted of atoms possessed of definite characters. While it may be said that there is nothing so small that we can not conceive of it being halved, it is assumed in relation to these ultimate atoms that they are of fixed sizes, and can not be further divided without change of nature; in short, for example, that, at a certain stage of subdivision, a piece of gold ceases to be any longer gold, if the process be continued. Though attempts have been made to express the sizes of such atoms, the figures convey to our minds no idea of their excessive minuteness. Inseparably associated with this notion of finite atoms is the assumption that they

are in a constant state of motion or vibration in various planes.

Our present knowledge of the composition of matter leads us to recognize some sixty-five or sixty-six so-called "elements" or species of matter, which, while able to exist in various states, are themselves incapable of further decomposition. The ultimate atoms of these elements differ among themselves in the proportion in which they tend to combine with each other, such proportions being constant for each element in all circumstances. This value in combination is an inherent property of atoms, and is known as their "atomicity," being expressed in figures which are termed the "atomic weights," "equivalents," or "proportional numbers."

The atom, then, is an indestructible, indivisible unit, in a perpetual state of vibration, and possessing a definite weight, which represents the proportion in which it always enters into combination with other atoms.

Another of our fundamental hypotheses deals with the relation that matter bears to the force it manifests. This word "force," defined as "the power of doing work," may be taken as denoting the properties that any given matter displays; and, as already said, as we can not conceive of matter apart from its properties, so we can form no useful idea of force distinct from the substance which shows it. This relationship may be thus postulated: that force is the outcome of the condition of matter, dependent on the mode of vibration of its constituent atoms, and that the various forms of force are but different modes of such vibration.

The most universal form of energy possessed by the atoms is the attraction they manifest for each other, to which the name of "chemical affinity" has been given. In virtue of their atomicity the proportions in which they enter into combination are constant for each element; but the readiness or force with which union takes place is of great variability, some elements uniting with the greatest facility, others only with much difficulty. The elements, therefore, may be said to be "elective" in their affinity, this property being also influenced by the conditions—such as heat—under which the union takes place. To this power we owe the countless variations of matter, of the compositions and decompositions of which chemistry treats. Hitherto the term atom has been employed to denote the ultimate particles of matter, more particularly of the chemical elements: to the corresponding smallest particles of bodies compounded of one or more chemical elements the word "molecule" is applied, and such molecules which are inconceivable of further division without decomposition are, equally with atoms, assumed to possess definite sizes and modes of vibration.

Another form of attraction, termed "cohesion," determines the degree of solidity or fluidity of matter, and in the passage of solids into liquids, and then into gases, this force of cohesion has to be overcome by means of some other form of energy, such as heat. Closely connected with the amount of cohesion existing between the compound molecules of a given substance are its flexibility and elasticity.

The varieties of energy known as heat, light, and elas-

tivity, are equally regarded as manifestations of molecular motion.

To all such forms of force the term "physical" is collectively applied, and, just as chemistry treats of the phenomena dependent on manifestations of chemical affinity, whereby the composition of substances is altered, so "physics" may be applied to the investigation of those changes which take place in matter, but are unaccompanied by its decomposition.

Directly following from this concept of energy is the law of the correlation of the forces and their mutual convertibility, which asserts for force the same indestructibility which matter possesses. The conversion of heat into light, of light into sound, of heat into electricity, and this again into mechanical power, is well known, and the best arrangements for such conversion are problems of the greatest economic importance.

Such, then, briefly stated, are some of the principles upon which every scientific observer now proceeds, whether it be for the study of the nature and movement of the planets, or for the more directly domestic questions of lighting, heating, and mechanical power. Given so much matter, we can, under favorable conditions, so alter the planes of motion of its ultimate particles as to transform the energy it manifests into force of some other kind. These favorable conditions mainly consist in the application to the given material of some force which, through the agency of the matter, reappears in some other form.

Nor are such considerations to be limited to the investigation of non-living matter. They are common to the entire material world, and equally lie at the root of our understanding of living things.

A distinction has already been drawn between those properties which a living being enjoys in common with all inanimate objects, and which we designate physical, and those which are met with only in plants and animals when alive, and which on that account we speak of as vital. And the question has been raised as to the possibility of these groups of energies being correlated.

Concerning such qualities as the cohesiveness, the flexibility, or the elasticity of the different tissues, nothing need here be said, since the same qualities are possessed by the tissues and organs after death, so long as decomposition has not occurred. But, limiting our attention to the phenomena presented by the living body, we notice that it manifests such forms of energy as heat and electricity, which are in all respects identical with the same forces when we artificially produce them in our fires and batteries, and which, so far as we can ascertain, depend for their production upon exactly the same conditions in both cases. When the tissues are dead, these properties, by no means the attributes of living things only, are no longer manifested. The other and essentially vital characteristics have this very significant point about them, that we are unable to imitate them artificially; that is, we can not arrange matter with that molecular constitution which shall liberate a nervous impulse, and we can not apply any of the forms of physical energy to any substance and obtain a transformation of that energy into a muscular contraction. But there was a time

when we could not convert a ray of light into sound. And there are not wanting those who assert that non-living material does, under certain conditions, become arranged in that form which displays all the characteristics of life. Passing on, then, to consider these distinctively vital forms of force somewhat more fully, we find them to be of two kinds, which, although invariably associated and dependent, the one on the other, are so far as we can judge separate and distinct. The first is the power by which the living tissue (protoplasm) converts the material with which it is supplied (food) into its own substance, or the process of assimilation as it is termed. In virtue of this power, the animal or plant grows and increases in bulk and complexity, and subsequently maintains its full-grown size. How this is done we are profoundly ignorant, but it would certainly seem to be of the nature of a chemical change, whereby the atoms and molecules of the ingesta are built up in an increasingly complex manner, differing in degree only, but probably not in kind, from chemical compositions with which we are familiar. Between the articles of diet as they occur in our meals and the tissues of the body which they ultimately form, are many stages, some few of which we can trace, but, though unable to see all, we need not at once assert the darkness to be impenetrable. The other essentially vital characteristic is the ability that the protoplasm has of responding to a stimulus, of manifesting some energy, that is to say, when such agents as the electric current, moderate heat or cold, weak acids or alkalies, or the mere mechanical irritation of pricking are applied to it. This power is known as the "irritability" of protoplasm. The response shows itself in various ways: the most general and easiest to observe is the alteration of shape that the stimulated substance undergoes; it moves; different varieties of this movement are to be recognized, but they are all modifications of one and the same property, which is termed "contractility." It is in virtue of this power that plants and animals are able to move from place to place, and that the beating of the heart, the act of breathing, and the numerous muscular activities of the body are performed.

Another form in which the irritability is displayed goes by the name of nervous force, including many phenomena of an extremely complex character. Consciousness, the production of sensations, the origination of impulses or stimuli that call forth on the part of the muscles contractility, whether voluntary or involuntary, the influence exerted over the nutrition of the tissues, are all forms of energy liberated by the substance we call nervous. In speculating as to the exact nature of these manifestations we remember that a due supply of oxygen is needful, and that there exists, diffused through the protoplasm of the muscular fiber or nerve cell, an amount of fuel substance, probably hydrocarbon, in an extremely minute state of subdivision. We further know that the waste of the nitrogenous tissue does not take place in proportion to the work done, but rather that the actual source of the force is the oxidation of this fuel substance, appearing, under the influence of the excessively complex and unstable protoplasmic molecule, as either muscular or nervous energy.

A third form of protoplasmic irritability is more dis-

tinctly of a chemical character, though the exact processes can not be formulated, nor even artificially imitated. Under the suitable conditions of proper supply of blood, certain specialized areas of protoplasm secrete various fluids, some of which, as the perspiration, are thrown off as waste matter; others, as the saliva and gastric juice, are more or less completely reabsorbed after doing solvent work in the process of digestion. Although much of the work done by the glands is entirely that of a filter whereby certain constituents of the blood are strained through the layer of epithelial cells which form the essential part of the gland, yet other constituents of the secretions are especially manufactured by these same cells from materials furnished by the blood. To what extent the epithelial cells suffer, or whether even these specific constituents are really the results of cell destruction, is as yet undetermined, but we only recognize these substances as being formed by living protoplasm.

Such, then, are the distinctive properties of living matter. In the simplest forms of animals and plants we find them all embodied in the same speck of protoplasm, which may be completely structureless, or may present only the first traces of organization conferred by the presence of a nucleus. Such a speck is everywhere contractile, everywhere irritable, and, with no distinction into specialized parts, there is no separation of function. Between such a one and the highest forms of existence, from the physiological point of view there exists but a difference of degree, progressively increasing subdivision of the labor of life with a coincident increasing complexity of structure. The life history of the lowest monad equally with that of the highest animal consists but of manifestations of contractility and irritability. The object attained in both cases is the maintenance of an existence which itself depends on movements directed to the acquiring of food, to the digestion and assimilation of that food, finally to terminate in special manifestations of contractility, which result in the reproduction of the species.

In attempting to investigate the fundamental nature of these forms of vital energy we are beset by many difficulties. But our difficulties are not diminished by refusing to consider them as being essentially states of matter, if not even varieties of molecular motion. There are no real grounds to warrant our attributing them to any cause different in nature to the cause of the physical forces, but, on the contrary, many reasons which irresistibly point to such being the case. In the first place, it is only in connection with one special kind of matter that these energies are exerted, and this exceedingly complex, unstable substance (protoplasm) is most readily upset. The alteration of a few degrees of temperature, the application of too strong an electric current, or of certain substances denominated, from their effects, poisons, are sufficient to deprive this material of its vitality without producing any change in its structure or chemical composition that we can detect.

It is not unreasonable to contrast such phenomena with the magnetizing and demagnetizing of a bar of iron by an electric current, which it is generally agreed to consider as

fundamentally consisting of alterations in the polarity of the molecules of the metal.

Another and more powerful argument in the same direction is the fact that the vitality of protoplasm is of limited duration. A portion of muscle can not go on contracting indefinitely; an epithelial cell can not continue to secrete for an unlimited time, and the powers of both these tissues are absolutely dependent on a due supply of food, thus bringing the animal or plant exactly on a par with a fire or lamp.

To some extent also the correlation of the physical forces finds an analogy in the common characteristics of the protoplasmic energies. While a nerve cell, muscle fiber, and gland cells all possess the power of self-restitution at the expense of food supplied to them by the blood, they differ markedly in the degree to which they manifest the properties of irritability and contractility, for, while the muscle displays this latter quality at its highest, the nerve and epithelial cells can scarcely be said to possess it, while they in their turn are subject to other series of molecular disturbances which liberate in the one case a nervous impulse, and in the other chemical energy. The study of the development of the fertilized ovum, when progressively with differentiation of structure is found specialization of function, would seem to point to a common nature for these forms of force, the difference in manifestation being dependent on the difference in apparatus (nerve cell, muscle, etc.) through which the force is liberated.

Although we can not pretend actually to demonstrate any correlation between the vital and physical energies, it is nevertheless instructive to notice some of the conditions under which the former are manifested. Prominent among these conditions is the fact that, when muscular contractility or nervous energy is manifested, there is a coincident production of heat and electricity in measurable quantity. And it is important to note that heat is not only an accompaniment of all vital processes, but it is also of absolute necessity that there should be a certain amount of heat present for such processes to be carried on.

We ourselves are not only producers of heat, but are entirely dependent upon a certain temperature for our existence. There is at least, then, a close interdependence, if not a correlation, of the vital and physical forces.

The progress of physiological investigation has referred many of the functions carried on in our bodies to purely physical causes. The important part played by elasticity in the movement of the blood, in expiration, and, to some extent, in muscular action; the permeability of the tissues to gases and fluids, which constitutes so large a share in the processes of nutrition, are all explained by physical laws: what I am here urging is, that the remaining factors of our living should be regarded from the same point of view.

The dependence of function on structure is now generally admitted, though not, perhaps, always remembered. That because such and such a tissue or organ has such and such a structure, gross or microscopic, therefore it manifests certain properties, is now about as generally accepted as the fact that because the wheels, spring, axles, etc., of which a watch is constructed are arranged in a certain defi-

nite way, therefore the watch goes; or, further, that because the steel spring has a certain molecular structure, therefore it is elastic. The importance of this admission is at once obvious when we come to treat of disease, itself a perversion of function dependent on some perversion of structure, which may or may not be apparent. No one doubts that the perverted action of a fatty degenerated heart is due to the replacement of the normal contractile muscle by a non-contractile substance—fat. And, though I admit in a large number of cases we can not detect the material changes in the tissues, we nevertheless are compelled to assume their existence, and look forward to their discovery, just as, fifty years ago, we might have hoped for the detection of fatty degeneration of muscle, which was then unknown.

With such a principle as this to guide us, you will see how entirely misleading it is to speak, as so many do, of "functional disease," implying thereby a perversion of function that has no material cause. All disease is functional; and if we accept function as the expression of a certain condition of structure, altered function must be due to some other condition of structure. I grant you this may be very minute, and, perhaps, at present not to be recognized by the best means at our command; but nevertheless it is there, and must be there, by the terms of our argument. If it be not so, then indeed will there be some special mystery surrounding living things, something unthinkable, and not to be investigated by us.

Nor can it be allowed that the dependence of function on structure is only true in certain cases and not in others; it must be wholly true or not at all; and so long as our present notions of the nature of force and matter hold, so long will it be necessary to accept only a material cause for vital activity, whether it be healthy or morbid.

A further value of maintaining this, which I would call a consistent view of physiology, is to be found in the possible explanation it affords of the mode of action of drugs. If the theory be accepted that vital phenomena are but forms of molecular motion, we shall be driven to explain the action of poisons, or other substances, brought in contact with the ultimate atoms of the tissues as an interference with their normal molecular vibration, and according to the extent and locality will be the results following these molecular lesions.

I know of but one phenomenon of living things which may not be expressed in terms in harmony with this theory of the ultimate nature of living matter, and that is what I would call the tendency to death. That it is common to all living things we are aware, but no plausible explanation of it has ever been given so far as I know. Yet, that all living things die in the course of time, does not seem to me to prevent the acceptance of the theory, though I can not begin to think why a material of a certain chemical composition, which manifests certain special properties, the expression, as we assume, of certain forms of molecular vibration, should of itself tend to cease manifesting such properties, the favorable conditions for their production remaining the same. I might, perhaps, imagine that molecules of matter could synthetically be arranged so as to

vibrate in those planes which are expressed by contractility, though I know of nothing to show that this has been done. But I can not imagine why, when once these molecules are so arranged, and are maintained in suitable conditions, they should of themselves tend to depart from that special form of motion.

I have, I hope, gentlemen, said enough to warrant our adopting, at least provisionally, a purely physical basis for physiological phenomena, or, at all events, expressing these in terms that are used in reference to chemical and physical changes. The advantage of this must be obvious. It breaks down the unjustifiable barrier that has been erected between the investigation of living and non-living things, and allows a uniformity of procedure that is both scientific and desirable, and this without any assumption of the absolute truth of the principle. It may be that in time the whole of our notions of the atomic nature of matter, and the relationship of force to matter, may undergo an entire change; if so, the physiologist will be prepared to meet it, and adapt his views to the newer and more correct doctrines. But it will be easier for him to do so if he have already been in harmony with the chemist and the physicist, instead of groping wildly in the maze of vague notions and ill-defined terms, as is now too often the case. At any rate, it will be conceded that physiological investigation, conducted on these lines, may help to substantiate or disprove much that we now hold in reference to the nature of matter and force.

If what I have said to you to-day be sufficient to suggest such trains of thought as may lead you to this end, I am satisfied.

Original Communications.

THE INDICATIONS FOR HYSTERECTOMY.*

By WILLIAM M. POLK, M. D.,

PROFESSOR OF OBSTETRICS AND THE DISEASES OF WOMEN AND CHILDREN IN
THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF THE CITY OF NEW
YORK; GYNÆCOLOGIST TO BELLEVUE HOSPITAL.

It is a well-established rule in surgery that so desperate an operation as Freund's is now acknowledged to be is not to be performed unless there exists reasonable hope of a permanent cure. In extirpation of the uterus a permanent cure becomes impossible the moment the pelvic glands become infected, they being so placed as to forbid any attempt at their removal. The immense number of lymphatics running from the uterus and their close connection with the pelvic glands make it almost a matter of certainty that in every case of cancer the latter speedily become infected. There is no question but that this implication may exist sometimes before the glands become enough enlarged to be recognized, so that in any given case it would be impossible for one to say with certainty that the disease was confined to the uterus merely because no indurations or enlargements were to be felt in the surrounding tissues.

* Being the substance of remarks made at a meeting of the New York Obstetrical Society, April 17, 1883.

In uterine cancer, the disease commonly begins at the cervix near the external os, and extends upward as well as outward. If, from the local and general conditions present, we had good reason to believe that the disease was confined to the cervix, and such was actually the case, amputation of the entire cervix, an operation comparatively safe and easy, is all that would be required. Should the disease have extended into the body, it would surely have reached the lymphatic glands, for the tonic required for the former is ample for the latter. Such cases would, therefore, be beyond any *curative* treatment, Freund's or other, palliation being all that is possible.

Touching the few cases of cancer which begin in the uterine body, it is simply a question as to the time of recognition. In the early stages they are regarded as instances of hypertrophy of the mucous membrane with what are called granulation formations; and as such are treated with the curette. Should such a case be recognized as cancer, before there was any decided enlargement of the uterine body, perhaps it would be fair to look upon it as one fit for Freund's operation, for prior to such enlargement the chances of glandular implication are remote. But, cases of primary cancer of the uterine body being comparatively rare, and their early recognition by no means easy, the opportunity for the operation in question, even here, is by no means common.

In sarcoma of the uterus the operation holds a strong position. In this disease glandular infection is far less rapid, the disease remaining localized longer than pure cancer, patients dying as often from septicæmia and pyæmia, resulting from the repeated efforts with the curette, as from the unmolested disease.

A large proportion of these cases can be recognized before glandular infection has occurred, even before there is any decided enlargement of the uterus; consequently, when everything is favorable not only for its operation, but for its early justification and cure. The disease, however, is very rare.

I may sum up by saying that in cancer of the cervix, the common form of uterine carcinoma, Freund's operation is contraindicated; for the disease, if local, can be eradicated by the amputation, if necessary, of the entire cervix, whereas, if glandular infection has occurred, a cure is impossible, palliative measures being then all that are justifiable. From this category I would exclude Freund's procedure, for it is, in my opinion, less useful and far more dangerous than a combination of the many now in vogue. In primary cancer of the body of the uterus it is justifiable, provided the diagnosis be made before glandular infection has occurred; but this is a difficult, and, in some instances, an impossible question to determine, and that too in a rare disease.

In sarcoma of the uterus it is fully justified, and the conditions calling for it can be determined with reasonable certainty, yet the disease is far from common. Consequently, the field open to the operation is very narrow.

ON CAUSES OF MELANCHOLIA.

By GEORGE BAYLES, M. D.,

ORANGE, N. J.

(Concluded from page 175.)

When Providence interposes, as will often happen, to undo our best endeavors, we shall have lost something, but not all. Any wise and established conservative system will work the better as time rolls on. Every circumstance at the outset is liable to be adverse, but the element of time makes every correct principle stalwart and operative. There is much in our every-day life that tends to mortal decay. An ideal life for a pregnant woman will be one that furnishes the power to resist the manifold influences which tend to depreciate the original value of her developing foetal germ. Practical common sense will grant that that interesting state of woman—viz., pregnancy—may be made much safer than it usually is made for both mother and foetus. This safety, of course, under our present line of thought and limit of inquiry, concerns only undeviating and normally healthy development. We, therefore, inquire what are the aids to development, and what will tend to preserve the normal mental and nerve endowment of the foetal infant. Conception should have elements of comparative certainty and welcome expectancy not always experienced by cohabiting parties. The frame of the connubial mind should be approving and expectant.

Conception should invariably be legitimate—i. e., in matrimony—for it can not be that illicit connection in a civilized community will be free from perturbing anxiety. Unhallowed and furtive chance will be accompanied by mental disquietude if not with terror, and this is prejudicial, in the highest degree, to germ integrity. Conception should not occur by undesired accident, even under the most proper matrimonial relations. This variety of fruitful intercourse, under the most proper matrimonial relations, will, in its results, greatly resemble what follows from illegitimate and unhallowed sexual commerce. Conception during the practice of any form of "*sexual fraud*," and hence unexpected and greatly undesired, is likely to be fatal to the integrity of the germ through the often violent emotions of discontent and alarm experienced by the female.

Conception should occur under the thrilling influence of love and mutual respect of the parties having sexual relations of the nuptial order.

Satisfaction with any result that may be found as a sequence of the intimacy should characterize any event that may lead to conception.

Any shade of discontent of the male party should not be permitted to overshadow the hopefulness and happiness of the female. Tacit agreement as to possible results should characterize these proceedings, and this should be maintained under at least the semblance of mutual satisfaction. In brief, conception should be approached honestly as to purpose; it should be honorable—i. e., lawful—it should be a joy to all concerned. It should not be a disagreeable surprise, and it should not happen through failure of any pre-

ventive measures so commonly and viciously resorted to in the midst of the most moral and well-conditioned communities. The most benign start that can be vouchsafed to the human germ will be, we believe, of incalculable advantage to the entity thus segregated from the maternal matrix.

The starting of a human life, if possible, without any profound emotional disturbance assures the right inclination or bias. To maintain this initial tendency requires the continuance of wisdom and of good principle throughout the period of gestation. The comparatively voluntary nature of the influences supposed to be efficient in preserving healthy fetal life is a notable and interesting fact. It makes parental responsibility all the greater, and augments in an important degree the value of real judicious and sufficient professional guidance and quasi guardianship.

The period occupied from conception to parturition by the normal state of pregnancy ought to be among the most healthy and happy of the critical periods of female life. That it often is not so we are well aware. That it is sometimes characterized by exuberant health we have all observed. Very much depends upon the state of health preceding conception; not a little upon the conditions associated with conception, and, more than all, by the prevailing conditions associated with pregnancy. So direct are all the favorable and adverse circumstances in their influence upon the product of conception, that the state of pregnancy has more interest for us than it has been usual to acknowledge.

The formative period of a human being ought to be subject to influences that are tranquil, cheerful, and hopeful in their effect upon the mother. Agents ministering to physical comfort and mental peace (if not repose) ought to be abundant and unailing.

The sort of ideal existence that a pregnant woman ought to be allowed to enjoy, to insure perfection of offspring, would not just now become us to inquire, because it is only attainable under extraordinary circumstances of great good sense, intelligent management, and ample means. Still, knowing that there is a standard, quite within the attainable, in some circles, we appreciate a state to work up to as circumstances permit.

How far short we fall of the ideal, or of that which it is possible to reach, the common every-day experience of the pregnant woman gives us deplorable examples. According to usual observation, it would almost seem to be a period of greatest suffering and inconvenience to the poor woman, not because of any local or general physical affliction, but because of the multiplication of cares, anxieties, burdens, slights, fears, and turmoils that crowd into this period in ordinary family life.

In the lower walks of life, is it not true that generally nothing is so unkempt, slouchy, neglected, unambitious of the petty niceties and delights of existence, and sometimes so completely overlooked in the coteries of their pleasures, as the pregnant woman? It would seem that the custom of this class so manifestly ignores the woman in the "family way" that she ignores herself. The honorable pre-eminence and glory of her peculiar state is not appreciated. Perhaps one reason is that it is of such frequent oc-

currence. She seeks comfort and moral support under every circumstance of discouragement.

This system of sorrowful subordination is found in every grade of society in varying degrees. The least harm it can do to the prospective mother is to create dejection or "lowness of spirits." The least harm it can do to the living entity within the uterus is to give a tone to its character tending to melancholia, or of some morbid cerebral function not limited by its own lifetime, but to be transmitted as a "queerness" to posterity through the line of its progeniture.

Heredity has laws regarding which we have some knowledge. To establish a wholesome pregnancy is the text of one of the great duties of our age. It contemplates the fairly good health of the parties about to become parents, the peaceful, happy home relations, the usual resources and domestic supplies unstinted, the usual cares of home or family judiciously lightened, or else cheerfully borne by others for the time; interesting and beneficial changes of occupation, amusement, and rest; unrestrained intercourse with generous, helpful friends, sufficient out-door exercise in every way that will contribute to pleasure of mind and body, and with preferred companionship; absolute banishment of discord and feud; the total absence of fright and dismay from any cause—in a word, as beautiful and happy a life during the term of pregnancy as can be attained.

To many persons of grosser composition, much that we would count as refinement and moral happiness would have no such aspect, and, therefore, would not be adopted as a source of comfort and gratification, were it ever so easy to obtain. So much graver the indictment against their ancestors. Still this is more apparent than real, as there is a natural craving in nearly every pregnant woman's soul for the kind of comfort and consolation we have depicted. These grosser natures are under a new spell when the impressions of approaching maternity are upon them. If ever they are susceptible to any kindly influences, it is just at this time. This lifting of the veil of grossness, stupidity, brutality, or moral degradation, is solely for the beneficent purpose of introducing some hallowed influences that will reach and, peradventure, rescue the offspring. Bring to bear, at such times, the sweet offices of neighborly charity, communion, and good fellowship, and a soul will be warped back into some semblance to human loveliness; and, more than that, the soul yet to be is saved from the direful effects of the insensibility or unimpressibility usual with the parental nature. Among the very lowly and the abject poor or criminal classes, how directly this will apply! The experiment has been tried too often to be doubted. But its aggregation of blessings has not yet been estimated in the mental calculation of the social economist, and we think not by the majority of busy practitioners of medicine.

Does this bear upon nutrition or innutrition in relation to the aetiology of melancholia? We think it can be shown that it does.

Emotional disturbances of a disagreeable nature interfere prejudicially if occurring at the moment that conception takes place. Emotional perturbations of a distressing nature will interfere with correct development of the fetus

during pregnancy. The principal response in foetal life to the maternal disturbing emotional impression will be within the nervous system of the foetus. The response must be of the nature of an agitating impulse, a wave of increased animation, and a subsequent suspension. This suspension of action will be within the molecular realm of the nervous system, and presumably of the great nerve-center, the cerebrum. This suspension, though transitory, is of the nature of an arrest of nutritive stimulus and supply. This suspension signalizes the end of one continuous process and the beginning of another. The planes of relation of the old and the new processes may be, and most likely will be, unequal. One will be above and the other below. If the former were above the latter, the result would be depreciation, and if the arresting or suspending impulse were of a disturbing and unfavorable kind, then depreciation would be the almost inevitable result. The many selvedge-edges, so to speak, within the nervous organization of a turbulent foetal life would be an interesting study, if so minute a department of nervo-histological research were open to us. The duration of these periods of suspended nutritive action would be as curious a subject of study as would be the physical demonstration of their results were that possible. Measure the physical effects of a bad dream, a sudden terror, a depressing suspicion, an unexpected conviction of guilt, the sorrow of a great loss, or the malign impression of an insidious superstition, we can not.

We can not, therefore, estimate in any degree the volume of these effects transmitted through the nerve conduits of the gravid uterus. We may conceive, with reason, that they are relatively as prolonged and as profound as the original disturbing impression, and, by reason of the immature action of less highly organized and developed centers upon which the impression is expended, it may be much more prolonged, and much more profound. We think we shall come nearer the truth if we regard such as the fact.

If emotion of the mother, excessive in degree, is capable of suspending foetal cerebral nutrition, thereby deflecting the lines of normal healthful action, and thus converting a brain without primary functional faults into one with functional faults, perhaps full of such faults, what should we say of that variety of innutrition due directly to insufficient food or defective assimilation of nutriment in the pregnant female? This evil relates not so much to the hungry and ill-fed through poverty and an insufficient food-supply (though it includes many of earth's millions under these heads), but more especially to those who are practically starved because of some functional and temporary hindrances to right digestive processes.

Indigestion and mal-assimilation are the great and current evils of the day, and particularly with the pregnant woman.

Emotion, mechanical difficulties, and subacute nervous disorders in the pregnant greatly contribute to this malady, with all its baneful manifestations; but, nevertheless, from any cause, a stinted nutrition bears as directly, as continuously, and as effectively upon the well-being of the foetus.

We are inclined to attribute non-assimilation of food during the period of pregnancy, when not due to stinted

food-supply, more to emotional disturbances than to any other cause. The importance, therefore, of controlling and guiding the emotional experiences of the woman during the period of pregnancy in relation to the question of foetal cerebral nutrition can not be overrated.

Emotion of the pronounced kind can directly arrest or suspend nutritive action in the nerve-centers of the foetus, or it can do this indirectly by an abridgment of nutritive elements. It generally does both at once, thus making the strength of one effect to re-enforce any possible weakness of the other. This dual action induces results that have come to be important enough to excite our serious consideration.

The kind of emotion capable of such extraordinary results within the organs of procreation is by no means a zephyr, or a trifling undulation of the ordinary current of mental sensitiveness.

Nevertheless, slight ebullitions of emotion are probably very potential in the direction under review.

Apprehensions, disappointments, disgusts, disgrace, wanton neglect and cruelties, will produce certain tempests of feeling known under the name of violent emotion that, in their direct effect can reach the very depths.

Overwork, impecuniousness, social obscurity, and ostracism (in cases where these are bars to ambition), envy, physical weariness, and general discontent, may be regarded as very liable to create these rages of feeling that in the end are effective and so pernicious.

Seconding the remote predisposing cause—viz., emotion—we have, in every-day life, all the immediate or proximate exciting causes of nerve distraction during foetal life. As examples of these, we will mention the effects produced by certain diseases, by alcohol intemperately used, also excessive impressions from *erethismus simplex* to *erethismus ebriosorum*, the erethism of inordinate venery, or any other variety of neural exaltation. The agencies which accidentally combine with any personal tendency or idiosyncrasy to create strong pathogenetic neural impressions are various, and of a kind that generally come under the head of voluntary or acquired, and are, therefore, avoidable.

The generic term melancholia applies, then, according to our mode of reasoning and review of initial influences, to the sum of aberrations of nerve function developed from impaired and vitiated elemental nerve-forces. It is largely, if not wholly, an inherited dyscrasia, and the heritage depends chiefly, if not altogether, upon avoidable conditions and influences. Whether recent or starting many generations back, a wrong impulse has at some time been given that the benign efforts of nature have not been able to overrule. A brain inheriting normal and healthy conditions is never susceptible to motives of melancholia, excepting under the direct influence of acute organic disease. There are many forms of accidental disease that are capable of impairing nerve-health and inducing melancholia. Even these have less power when tendencies which are inherited are normal or nearer the standard of health, and these present better opportunities for prompt recovery. The great problem of the age is how to avert malign agencies that will undermine and vitiate the nerve power of infants,

thereby giving them a fair start in the life that is nothing without mental health.

The tendency of our age is toward every condition of impaired brain- and nerve-health. To cope with the necessities and difficulties of life seems almost too much for the average human being. Strange lives, without apparent intellectual balance and sense of fitness and moderation, seem increasing on every hand. Strange nervous affections are more and more numerous as time goes on. To be tired of life is a frequent and constantly increasing experience.

Destruction of life, including especially self-destruction, is a crime that presents more abundant and startling instances in our day than perhaps ever before in the world's history, where the provocation is not from without but within. One conclusion of melancholia—viz., the total wreck of the intellect—is greatly on the increase, filling our mad-houses to overcrowding, and spreading misery in our communities beyond calculation. We have seen that ordinary and unexciting social and political events, which alone at present prevail, are inadequate to explain this enormous and steadily augmenting volume of mental wildness.

We are forced to look below the surface of ordinary human events for a reason for this alarming state of things, and, if we have not found it, or, at least, the initial lesion that belongs to it, we have found something that is harder to dissociate from this state of affairs than it is to soothe ourselves into the belief that what we have found is of no great consequence, and quite harmless.

What we have found is certainly mischievous, and our calm reason and judgment will revolt at the neglect to assign this mischief to that class of evil agencies which create results for which it seems amply sufficient, and for which we have no other assignable cause. As a cause of melancholia and its congeners, we have certainly alighted upon what we must not ignore, and our duty, though appearing almost boundless in its enormous demands, is, in some aspects, very clear. Medical practice is only one department of our mission, and, probably, not the most important.

If, as in time it will, our profession shall rise to the full dignity and authority of its calling, there will be instituted a system of protective sanitary schooling, or physiological gymnasium, under which all our patients will be our pupils, and our Divine Creator the dean of our chapter. If we know where to begin, we shall soon learn how to begin.

Science has no mission in the presence of evils that have gone beyond a remedy.

Scientific patching and repairing are our present practice and delight. Scientific curing begins long before we are now wont to essay our aid. We must begin at the beginning if we would truly cure the evils that everywhere confront us. Then will our profession rise to the true rank of a divinely appointed institution, in which the scientific physician is a priest, a father confessor, a purveyor of true absolution; and the world will receive some benefit commensurate with the pretensions of our science.

THE PATHOLOGY OF ACUTE LOBAR PNEUMONIA

FROM A NEW STANDPOINT.

By WILLIAM D. SCHUYLER, M. D.

Second Article.

Designation of the Disease; its Nosology and Histological Definition; Description of the Disease; its Essential Character; not an Inflammatory Disease; not essentially a Fever.

THAT there may be no misconception as to the form of this malady to which reference is made in this paper, I would especially designate it as that pneumonic disease which has the site of its primary lesion in the walls of the capillaries of the pulmonary stroma of the affected area, but which originates, according to Tanner and Bristowe, "in the lung substance," according to Niemeyer "in the air cells," according to Roberts "in the tissue of the lung," according to Wilson Fox (Reynolds's "System of Medicine") "in the vesicular structure of the lung," according to Jurgensen (von Ziemssen's "Cyclopædia") "in the alveoli and bronchioles," according to Delafield "in the air vesicles and interstitial tissue," according to Aitken "in the true pulmonary tissue," and, according to Flint, "in the pulmonary substance or parenchyma, in the air cells, and bronchioles."

While I agree with these authorities that the obvious seat of this malady is in the pulmonary stroma or parenchyma, yet, for reasons to be given hereafter, I would more definitely locate the initial lesion, as stated, in the walls of the capillaries of the affected area.

Nosologically, I would designate this most important disease as an acute lobar pneumonia, which title, while it has reference to the locality of the process, its extent, and the nature of the attack, does not limit the nature of the action.

Histologically, I shall show that the first event is a *functional insufficiency* of a certain number, few or many, of the pulmonary, functional capillaries, which comprise a short segment of the systemic circulation; that the first result is a passive filling of these vessels, an obstruction to the systemic current, and an extension of the insufficiency through collateral action and pressure; that the second event which develops is an *anatomical insufficiency* of the capillaries first affected, resulting from extreme pressure, and that the second *result*, due to the latter insufficiency, is *exudation* or extravasation.

I shall treat, therefore, of acute lobar pneumonia the immediate origin of which is in the pulmonary capillary walls, the principal pathological features of which are, first, a functional obstruction of the systemic blood in its passage through the lungs; second, an exudation which consolidates the involved organ. Further, this malady is the acute pneumonia of the sporadic form met with in general practice, which develops with a sudden onset like a stroke, in which the involved pulmonary structure, from the fraction of an organ to an entire lung, or even more, undergoes a process of rapid solidification, with loss of function, but which immediately, and in a typical case such as we are con-

sidering, with equal rapidity again undergoes resolution by softening and absorption of the solidifying mass, and at an early day permits the lung to regain its normal condition, with perfect renewal of its functions.

This pneumonic process is attended by a characteristic fever, and general, well-marked functional disturbances.

The prominent features of the former, as depicted by its temperature curve, are its sudden rise to its maximum high point shortly after its onset; second, its equally rapid and often more extensive decline when defervescence sets in; third, its maintenance of a high elevation between these two points. Again, as this curve often shows a late rise just prior to its marked decline, and as the decline quite frequently takes it to a point a degree or more below normal, these may be considered as others of its special characteristics.

The symptoms denoting functional disturbances are: difficult respiration, or marked dyspnoea; difficult, hesitating speech; a small, soft, empty pulse; arterial anaemia; loss of appetite; scanty urine; constipation; venous congestion; an overworked right heart; nervous, especially mental, depression.

The characteristic attendant symptoms are: a sharp, short chill; sudden accession of fever; pain in the side, or pulmonary, not constant, distress; persistent hacking, sometimes harsh, hard cough; a characteristic expectoration; highly-colored, scanty urine; a skin at first hot and dry, afterward bathed in profuse and persistent perspiration; a herpetic eruption, not constant, about the mouth; cyanosed, dark countenance; a bright hectic spot on the cheek; a furred tongue; dark mucous membranes, especially of the mouth, eyes, and tongue; mental anxiety; possibly mild delirium; great restlessness; and evidence, as the disease advances, of a rapidly developing asthenia.

These symptoms continue unchanged, or quite as frequently increase in gravity up to the moment of defervescence, when they singularly and specially abate, at which time the patient experiences such relief that, notwithstanding his markedly asthenic condition, he expresses himself as well. The debility which results from an attack of this malady is of so marked a character as to be worthy of notice, especially as explaining a delay which, in many cases, attends convalescence, and also as furnishing indications for the treatment of the condition.

The duration of the malady is variously estimated at from three to twelve days. Convalescence may be well inaugurated as early as the fifth and generally by the tenth day, or it may be delayed many days or even weeks longer. I have met with cases where evidence of complete, localized consolidation still existed at the end of two months, after which restoration of a healthy condition of the lung and its functions was established.

While the foregoing constitutes an outline sketch of the course, symptoms, and duration of the malady, and while its duration averages from seven to fourteen days, including a safe convalescence as it occurs in a moderately robust subject, yet the events of which an attack is comprised vary as to particulars, in every case or patient, as to character, extent, and duration. These variations are due to idiopathic

states, nutritive conditions, character of constitutional reaction, concurrent or causal conditions; to treatment, care, and nursing; extent of lung involved, order and progress of attack; and, lastly, are influenced by the inherent recuperative powers of each individual patient.

WHAT IS THE ESSENTIAL CHARACTER OF THIS MALADY?—From the literature of the subject up to the present time we shall have no little difficulty in arriving at a satisfactory answer to this question, on account of the various theories therein set forth, the uncertainty of the deductions reached, and especially on account of the fact that no theory set forth is adequate to explain all or even some of the more important phenomena of the process.

In the early days of medicine, it was described as a peri-pneumonia, and then, as down to the present time, by a majority of writers and practitioners, treated as an inflammation of the lung structure, or as an inflammatory disease of the lungs. Within the past three decades or thereabout, however, there has been shown a growing dissent from this traditional view, and this notably among the more prominent of the recent writers. This dissent has developed out of considerations of the special characteristics of the phenomena which make up the process, and of their unlikeness to the events which are comprised in or make up acknowledged inflammatory diseases, and an inability to explain these phenomena upon a simple inflammatory basis unaided by other hypothesis. This dissent is further strengthened by the following facts: (a) That the malady, uninfluenced by treatment, and under favorable circumstances, is proved to be a self-limited affection; (b) that its attendant pyrexia pursues a cyclical course, and is characterized by an almost pathognomonic temperature curve; (c) that there is a seeming want of relation between the local lesion and the constitutional symptoms; and (d) that the local lesion does not result from causes which excite inflammations in general and in other structures. On account of these characteristics and other facts to be presented, a simple inflammatory basis has been abandoned by some, and an increasing number, as not affording an adequate explanation for the phenomena presented.

But, because of the aetiological obscurity which has enveloped the genesis of the disease, on account of the orderly character and progress of its development, from the distinctive characters of its pyrexia, before alluded to; because the disease embodies well-marked constitutional features on the one hand, and an equally not less pronounced characteristic lesion on the other; because there is no exact conformity of the former to the extent of the latter; because of the dangers and sudden death which may occur at any stage of the malady, and which are not satisfactorily accounted for by the extent of the local lesion; and because of the generally conceded negative effects of treatment upon the progress of the local lesion—from the likeness of these characteristics to similar characteristics of the infectious maladies, from the general resemblance of the constitutional manifestations of acute lobar pneumonia to those of the infectious fevers, though they are not strictly similar, this malady has been termed by the dissentients a constitutional infectious disease, an essential fever, and likened to ty-

phoid fever, cerebro-spinal meningitis, small-pox, or acute articular rheumatism. In other words, it has been characterized as a special fever, due to a constitutional *materies morbi*, a blood-poison, with a local pulmonary lesion, which is pathologically similar to the intestinal lesion of the solitary and agminated glands in typhoid fever.

While some argue that a specific poison, *materies morbi*, is essential for the production of this fever, others hold that many and different poisons may cause its development.

Furthermore, besides those who still regard and treat acute lobar pneumonia upon the old view that it is a local inflammatory disease (and they comprise a majority of physicians), and, second, those who hold that it is a constitutional affection, an essential or infectious fever with a local lesion, there is a third class, who, while they believe the inflammatory theory inadequate, do not entirely accept the hypothesis that the disease is a specific fever, although they attribute the pathological state to the action of a constitutional poison.

All medical men without exception, so far as I am aware, hold and treat the local affection, the pulmonary process, as an inflammation of a croupous or fibrinous character.

A general view, then, such as has been summarized, of this pathological process establishes the remarkable fact that, at this time, this common and most important of all diseases, a disease which every practicing physician is called upon to treat, whose characteristics are most strongly marked, whose ravages are felt in every quarter of the habitable globe, whose effects even in our own city are most fatal, and at times with surprising suddenness—a disease which terminates more active valuable lives than any other malady, and which affects the lower animals as well as man—that this disease, so far as its essential nature or true character is concerned, is still *sub judice*, not settled, but unknown.

Although the statement that pneumonia is essentially an unknown disease will strike many as remarkable if not unwarranted, yet it has the support of no less an authority than Wilson Fox, who, writing in Reynolds's "System of Medicine," says, "The pathogenesis of acute primary pneumonia is involved in considerable doubt and obscurity, and has been the subject of much discussion." And further he refers in the margin to the lectures of Dr. Parkes ("Med. Times and Gazette," 1860) as illustrating the point, and as showing that at that time, twenty years ago and upward, the old view of the disease was deemed unsatisfactory by many, and that a discussion as to its nature had been carried on—namely, as to whether it was a local inflammation or a constitutional fever. Upon this subject the author just referred to says: "Two opposite theories have been advanced respecting its origin, both of which are supported by certain facts and opposed by others." He thereupon gives the two hypotheses regarding its nature as set forth—the constitutional, febrile, or specific on the one hand, and the local or inflammatory on the other—and adds: "The second hypothesis as such appears to be scarcely a tenable one, and even the first appears to require some modification. This statement briefly characterizes the present

status of the subject, and sets forth the unsettled conditions of belief entertained in regard to it by medical men."

The supporters of these views, first, that pneumonia is a local disease, simply an inflammation of the lungs, and that the attendant and constitutional phenomena are its consequences, are Aitken, Tanner, Watson, Bartholow, Niemeyer, and others; second, that it is a constitutional malady, an infectious fever, is supported by Flint and Juergensen.

As we have seen, while he advocates a constitutional infectious character for the disease, Wilson Fox does not clearly subscribe to either hypothesis offered, and Loomis ("Med. Record," vol. xix, p. 413, "Discussion of Sanders's Paper") adopts the latter view. He does "not believe pneumonia to be a local disease, nor was he prepared to regard it as a specific constitutional disease with a local lesion. He preferred to occupy a middle ground, that pneumonia, like many other inflammations, may be developed by a variety of poisons."

The prominent advocates of the constitutional infectious febrile hypothesis are Professor Flint, of our own city, and Juergensen (von Ziemssen's "Cyclopædia"), of Tübingen.

I can best set forth this view in their language. Professor Flint ("Principles and Practice of Medicine," edition of 1881) says: "The view now taken of the pathological character of the disease differs from that presented in previous editions of this work, and is not yet generally entertained by medical writers and practitioners. Acute lobar pneumonitis in the nosological systems of the present, as of past time, is placed among the local diseases, and, in regard to certain questions, it has been regarded as the type of a purely inflammatory affection. This view of its pathological character I hold to be erroneous. The pulmonary affection is doubtless inflammatory, but it is the local manifestation or the anatomical characteristic of a febrile disease, sustaining to the latter a relation analogous to that which the affection of the solitary and agminated glands sustains to typhoid fever. If this doctrine be true," says this author, "the proper place for this disease in the nosology is among the essential fevers." Professor Flint attributes the enunciation of this doctrine in this country to Dr. William H. Draper, who set it forth "in a paper read before the New York Academy of Medicine in 1866, and published in the Bulletin of that year." As already referred to, Dr. Parkes discussed the point quite fully in England in 1860. His remarks were published in the "Med. Times and Gazette" of February 25th of that year.

As Juergensen's formulary (von Ziemssen's "Cyclopædia") for this hypothesis is strongly put, I give it entire. He says: "Croupous pneumonia is a constitutional disease, and is not dependent upon a local cause. The pulmonary inflammation is merely the chief symptom, and the morbid phenomena are not due to the local affection. The hypothesis of a morbid cause is indispensable. Croupous pneumonia belongs to the class of infectious diseases."

From the fact that this view, the constitutional infection, has much to commend it and is fast gaining ground, I justify myself for giving it at length.

But, in regard to the nature, essential character, and

pathogenesis of this disease, I now venture to express the opinion that the facts which exist when fully considered do not sustain either hypothesis set forth. Nor do they justify general teaching that the local affection is an inflammatory process. Furthermore, on the contrary, I shall suggest in this paper for the nature and character of the pathological process of acute pneumonia, an action totally different from any heretofore promulgated, the truth of which I shall show is maintained by all the related facts.

I am not unmindful of the importance of the negative position here assumed in regard to existing theories as to the essential character of the malady, nor of the seemingly well-grounded opposition I must encounter in advocating a non-inflammatory character for the local affection, but I shall show that the facts to be deduced justify the assumption.

First, acute lobar pneumonia is not an inflammatory disease: because it is unlike inflammatory diseases ætiologically—in regard to frequency, to locality, and in the time of its occurrence; it is also unlike them in the mode of its accession, manner of development, nature of local process; in its exudation, course of exudation, and in its consequences. Of its unlikeness to inflammatory diseases in general, Juergensen says: "The inflammatory diseases (including under this general name pericarditis, pleuritis, laryngitis, cephalitis, hepatitis, peritonitis, gastritis, and enteritis) present annual ranges which are very different from those of pneumonia, and vary but little in frequency from year to year." This shows a general causal incoincidence. The author referred to makes the foregoing statement from an analysis or comparison of von Ziemssen's of the "London Mortality Reports for the years from 1840 to 1856," in which he also finds that the diseases more closely related to pneumonia anatomically, bronchitis and pleurisy, do not coincide in point of time with that malady.

Further, in regard to the former, bronchitis, an inflammatory disease, in which the structure involved may be regarded as comprising a portion of the pulmonary stroma Juergensen says: "This malady, like catarrh, increases in frequency the farther we advance from the tropics to the higher latitudes; this is not the case with pneumonia, which occurs in all degrees of latitude, and does not seem to be more frequent in one than another." But, to this last general fact there may be exceptions; for, as regards the disease in our own country, Dr. Flint says, "It is vastly more frequent in the Southern than the Northern States." The temporal causes of these three diseases are unlike. According to all observers, pneumonia is most frequent in mid-winter and spring, while bronchitis, though most frequent in spring, yet with pleuritis prevails more generally than pneumonia throughout the year.

It is also unlike all inflammatory disease in its more direct mode of accession. It is always developed directly, irrespective of extrinsic agencies. It does not result from contiguous inflammations, not even from pleurisy or bronchitis, which structurally may be considered as inflammation of the pulmonary stroma; nor from empyema nor gangrene, and it is not produced by contusions or penetrating wounds (Flint). In the rapidity of its development to the formation

of an extensive consolidation, in the amount of its exudate, which may be from two to four pounds (Flint), in the completeness and even character of consolidation throughout the affected area, in the transient character of the consolidation, and in its complete removal, leaving the lung structurally and functionally intact; in the tendency of this process to attack a certain portion of the lungs, the lower lobes, and especially the lower lobe of the right lung; and in its compact, not diffuse, mode of extension, possibly to a second, and in a certain proportion of cases to a third lobe—it manifests laws of development, course, and effect, which are dissimilar to those of a simple inflammatory disease, and which "are suggestive of a constitutional cause" (Flint).

Another dissimilarity of this malady to the inflammatory diseases is found in a want of relation of its general symptoms to the local lesion. "In pneumonia an extensive consolidation may be attended with a slight fever, while, on the contrary, a small consolidation may be attended with high fever and severe general symptoms" (Juergensen); while in inflammations in general it is the rule that a certain grade of intensity of constitutional or general symptoms indicates the character and extent of the local lesion, and governs the prognosis in the case. The fact that there is no general relation between the local and constitutional symptoms in pneumonia is well known. Nevertheless, this observation is true in a general way—I hold that in individual cases, or idiopathically, such relation does exist.

Furthermore, as pneumonia can not be produced by any of the usual causes of inflammation, however strong or weak their action (Juergensen), as it does not conform to the laws of inflammatory diseases in its course, being self-limited, while they are the reverse; nor in the character of its temperature curve, which instead resembles those of the infectious fevers; as it shows little or no tendency to relapse, while relapses are common in inflammations; as after a pneumonic process, the patient, as stated, beyond being singularly exhausted (considering the brief duration of the active stage), is well; and, lastly, as, unlike the resulting state after a general inflammatory disease, there are no effects beyond debility, which prolong convalescence—it should not be classed with these maladies. The foregoing affords abundant reason for rejecting the theory that acute lobar pneumonia is an inflammatory disease.

Is acute lobar pneumonia essentially a fever, a specific infectious disease, with a local lesion, due to a specific blood-poison (Juergensen, Flint), or to one of many poisons (Wilson Fox, Loomis, Draper)? And is the local affection, the pulmonary event, only a result of the constitutional disease (Juergensen), a conservative process by which a *materia morbi* is eliminated from the system (Draper)? Furthermore, is the disease a pathological process similar to the infectious fevers—namely, typhus, typhoid, the intermittent, the exanthemata, articular rheumatism, or epidemic cerebrospinal meningitis?

As stated, a careful examination of all the related facts, in the opinion of the writer, does not justify an affirmative conclusion.

But, in order to reach a sound deduction upon this

point, we must hear and examine what the adherents of the pyrexial hypothesis have to say in its support.

(To be continued.)

Book Notices.

BOOKS AND PAMPHLETS RECEIVED.

Leçons sur les maladies mentales. Par B. Ball, professeur à la Faculté de Médecine de Paris. Paris: Asselin et cie, 1880-1883. Pp. x-884.

Types of Insanity: an Illustrated Guide in the Physical Diagnosis of Mental Disease. By Allan McLane Hamilton, M. D., one of the consulting physicians to the insane asylums of New York City, etc. New York: William Wood & Co., 1883. 4to, pp. 36; ten plates. [Portfolio cover.]

A Practical Treatise on the Medical and Surgical Uses of Electricity; including Localized and General Faradization, Localized and Central Galvanization, Franklinization, Electrolysis, and Galvano-cautery. By George M. Beard, A. M., M. D., etc., and A. D. Rockwell, A. M., M. D., etc. Fourth edition, revised by A. D. Rockwell, M. D., with nearly two hundred illustrations. New York: William Wood & Co., 1883. Pp. xxx-758.

Caso Clínico Notable de Carcinoma Medular Difuso del Hígado con Cirrosis Carcinomatosa, etc. Por los Doctores D. Leopoldo Lopez García, etc., y D. Juan Manuel Mariani y Larrion, etc. Madrid: Nicolás Moya, 1883. Pp. 19. [Price, 1 peseta.]

The Next Step for the Medical Profession of the United States. An Address, etc. By D. B. St. John Roosa, M. D., LL. D. New York, 1883. Pp. 16.

The Management of Abortion. By Walter Coles, M. D. [Reprint from the "St. Louis Courier of Medicine."]

Nineteenth Report of the Trustees of the City Hospital, Boston, with Reports of the Superintendent and Professional Staff, etc.

Eleventh Annual Report of the Board of Health of the City of Boston, for the Financial Year 1882-'83.

Report of the Department of Health, City of Chicago, for the years 1881 and 1882.

Fifteenth Annual Report of the President of the Inebriates' Home, Fort Hamilton, N. Y., for the Year 1882.

Correspondence.

LETTER FROM VIENNA.

The Facilities for Summer Work in Vienna.—The Iodoform Treatment of Wounds.—The Removal of Lymphatic Glands from the Neck.—The Lying-in Service.—Tracheotomy.—The Rapacity of Assistants.

VIENNA, August 1, 1883.

PROBABLY most of your readers suppose that Vienna during the summer vacation can present but few attractions for the medical student; yet I can testify that this is the time when some of the best and hardest work is done. An American arriving here in midsummer is met by the discouraging statement that he has come at the wrong season, that there is nothing to learn, and that he will do better to go away and return in the autumn. I am convinced that this is an erroneous idea, and would most earnestly advise those of my countrymen who can

spare only two or three months in the summer for medical study abroad, to spend that time here. The courses are not crowded, the material is sufficient, and the instruction is little inferior to that given during the semesters. For one especially interested in obstetrics, this season of the year is particularly favorable, since there is not now *ganz eine Epidemie von Praktikanten*, as a German tersely expressed it. With the delightfully cool weather which we have thus far enjoyed, I can not imagine any surroundings more inducive to earnest work than the shady alcys and breezy wards of the *Krankenhaus*.

In Billroth's clinic (conducted during the summer by his second assistant, v. Hacker) it is noticeable how strictly antiseptic details are carried out, even in minor operations. The spray is entirely dispensed with, except in peritoneal surgery, when it is used for an hour before (but not *during*) the operation, absolute cleanliness being enforced on the part of the assistant. Iodoform gauze seems to be the favorite dressing, and drainage-tubes are used even in superficial wounds. Deep wounds are packed with the gauze, which is not removed for several days. It is asserted that the danger of iodoform poisoning is reduced to a minimum when the drug is used in this way. I am unable to state what the percentage of recoveries is under this routine treatment, but have been informed that the results are quite favorable. A favorite operation this summer seems to be the removal of enlarged lymphatic glands from the neck, even in cases when they cause no mechanical obstruction. It would be difficult in America to persuade a patient to undergo a long and dangerous operation, involving, perhaps, the ligatures of large vessels, and eventually an unsightly scar, when no question either of life or of comfort was concerned. This is unquestionably a surgical concession to the modern theory of the origin of tuberculosis.

As before stated, one's time may be spent most profitably in the lying-in wards at this time of the year. The system of perfect cleanliness which prevails is attended by gratifying results. Professor Carl Braun kindly showed me his report, extending over a period of four months, and including one thousand cases of midwifery, with only two deaths—one from placenta prævia, and another from eclampsia. In Spaeth's wards during the same period there were no deaths. Such statistics are indeed surprising when one considers the large number of difficult and instrumental labors which occur here, and the fact that the women are constantly being examined by men in daily contact with the cadaver.

An occasional visit to the St. Anna's Children's Hospital is not without profit. I was able to observe several cases of tracheotomy there, and noticed that in each instance the operation was performed earlier than with us. The percentage of recovery is about 30 or 40.

The number of American students at present in Vienna is small, as they seem to have adopted the popular idea and wait till autumn before coming. One only needs to be here a few days in order to become convinced of the truth of the reports which he has received at home in regard to the growing rapacity (to use a term not too strong) of the average Vienna assistant. The tendency to shorten the courses and increase the fees offers an alarming prospect for the student of the future. Unless I am greatly mistaken in regard to the expressions of dissatisfaction which I hear universally from Americans who have been long studying here, the time is coming when the increasing clinical facilities of our own larger medical centers, and the greater courtesy, not to say conscientiousness, of our instructors, will render foreign medical study less fashionable than it used to be. Certainly the opportunities for post-graduate work in New York are not to be despised even now, in comparison with those of Vienna.

THE
NEW YORK MEDICAL JOURNAL,
A Weekly Review of Medicine.

Published by
D. APPLETON & Co.

Edited by
FRANK P. FOSTER, M. D.

NEW YORK, SATURDAY, AUG. 25, 1883.

THE PHYSIOLOGY OF SLEEP.

As regards the vascular condition of the cerebrum during natural sleep, there seems to be at present a virtual agreement among physiologists. Whatever views may be held of the immediate or proximate cause, it is generally admitted that during sleep the brain is relatively anæmic. There are well-attested facts enough on record to substantiate this. The brain, denuded of a portion of its cranial covering, has been carefully watched during the waking state and in sleep, and it has been ascertained that, both in man and in the lower animals, the organ is comparatively bloodless during sleep, and its circulation more sluggish than at other times.

In the early part of this century Blumenthal first enunciated this theory, and supported it by the interesting case of a patient who had lost a portion of the right frontal bone; during sleep the brain was seen to be anæmic and in a collapsed condition. Dendy* relates a similar case, which was observed in 1821. But Durham's memoir on the physiology of sleep, which was published in the volume of "Guy's Hospital Reports" for 1860, was the first really thorough and scientific contribution to our knowledge of the vascular state of the encephalon during sleep, and the relation of that state to the phenomena of sleep. To Hammond also, many of whose experiments were made prior to Durham's publication, we are indebted for numerous original observations, and for the most exhaustive and conclusive exposition of the subject yet given to the world.†

We may say that during sleep all the encephalic blood-vessels are under a diminished pressure, as proved in fact by the manometer, and that this lessening of the active flow corresponds with a diminution of cerebral function. Even if no experiments had ever been made, inductive reasoning would have led irresistibly to this conclusion. During the intervals of digestion the gastric mucous membrane is relatively pale and bloodless; the submaxillary gland does not become turgid with blood until it begins to secrete saliva; a muscle in action becomes markedly hyperæmic. It is so with the organs in general. The performance of function is characterized by vascular activity and fullness. If in any part there is a call for work, there is a call for more blood. The nervous system forms no exception to this law, and there is the most intimate and absolute correlation between the evolution of nervous energy and the

activity of the circulation. So true is this that it is everywhere admitted that the induction of functional work in any such apparatus as the digestive, the sexual, or the muscular, produces a degree of hyperæmia of the apparatus called into action sufficient to prove a serious hindrance to the easy and satisfactory performance of any severe mental task.

Professor Mosso, of Turin, has lately made some interesting experiments on persons who had lost portions of the cranial bones, using Marey's ingenious hydro-sphygmograph. Noting, like others before him, that during sleep the brain diminished in volume, with shrinkage of its blood-vessels, and that the lively blush characterizing its surface during the waking state disappeared, he observed also that any sudden impression, if sufficient to rouse the brain to partial activity, was sure to be attended with an increase of its vascularity and its volume. He has proved, too, that every effort of the intellect is normally accompanied by a diminution of volume in the peripheral parts, the arm, for example, and that, on the contrary, when the cerebral activity is lessened the distant members are augmented in volume. Sleep is always accompanied by a dilatation of the vessels of the extremities, and particularly of the forearm, where this dilatation has repeatedly been measured by Mosso with his registering apparatus. Every excitation from without causes a contraction of the vessels of the forearm of the sleeping subject, and the augmented blood pressure at once produces a renewed afflux of blood to the brain. In this manner the fluctuations of cerebral activity can be followed: a sound, a touch, a ray of light falling on the closed lid of the sleeper, all give rise to modifications of the cerebral circulation—unperceived, doubtless, but possibly the source of dreams.*

The immediate cause of sleep is not simply the shutting off of a portion of the blood current from the brain. There are more important factors. Here Vulpian† is right. The lessening of the blood supply to the encephalon is rather the accompaniment than the cause of sleep. We can not produce normal sleep in a person simply by exsanguinating his brain, or else we should have in an ice-cap and a hot foot-bath the speediest and most effective of hypnotics. The brain must first be in a certain condition. There must be in the constitution of the supreme nerve-centers something that forbids further activity, and with that cessation of activity there will be a lessening of the blood-flow to the brain, in accordance with the physiological law before stated. What is the particular modification of the cortical cells which renders them less fit for the liberation of their special forces, and finally compels a suspension of action, with a diminution of the blood supply? Herbert Spencer has given a very plausible explanation, in accordance with the theory of evolution:

The waste of the nerve-centers having become such that the stimuli received from the external world no longer suffice to call forth from them adequate discharges, there results a diminished impulse to those internal organs which subserve nervous activity, including more especially the heart. Consequently, the nerve-centers, already working feebly, are supplied with less blood and begin to work more feebly, re-

* "The Philosophy of Mystery," London, 1841; cited by Hammond in his work on "Insanity."

† See articles by Dr. Hammond in this journal for 1865 and in the "Journal of Psychological Medicine" for 1869, also his "Sleep and its Derangements," Philadelphia, 1872, and his "Treatise on Insanity," New York, 1883.

* "Yung, Le sommeil normal et pathologique," Paris, 1883.

† "Leçons sur l'appareil vaso-moteur," t. ii, p. 154.

sponding still less to impressions, and discharge still less to the heart. And so the two act and react until there is reached a state of profound unimpressibility and inactivity. Between this state and the waking state the essential distinction is great reduction of waste, which falls so low that the rate of repair exceeds it. . . . During the day the loss is greater than the gain, whereas during the night the gain is diminished by scarcely any loss. Hence results accumulation; there is restoration of nerve-tissue to its state of integrity.

According to Mr. Spencer, that rhythmical variation in nervous activity which we see in sleep and waking is the result of adaptation, due to survival of the fittest. "An animal so constituted that waste and repair were balanced from moment to moment throughout the twenty-four hours would, other things equal, be overcome by an enemy or competitor that could evolve greater energy during the hours when light facilitates action, at the expense of being less energetic during the hours of darkness and concealment."*

With some qualification, the foregoing statement is about as satisfactory as any that has yet been offered as to the proximate cause of sleep. During the waking hours the vaso-motor center in the medulla is doubtless under inhibition by the superior centers, and there is relative relaxation of the cerebral arterioles, with dilatation of the capillaries; when the cells of the hemispheres are exhausted, they are no longer able to exercise this inhibition—in common parlance, they no longer powerfully attract the blood—and the vaso-motor center "puts on the brakes"; the blood supply is then no longer sufficient for function, though enough for nutrition.

An ingenious theory has lately been proposed by Preyer, of Jena,† according to which, to use a homely illustration, the fire ceases to burn because the flues are clogged with cinders.

As Preyer puts it, the activity of the cerebrum is a sort of respiration, while its repose is a sort of asphyxia of this organ. It is certain that every psychical act, every thought, involves a certain consumption of oxygen by the nervous substance. During waking, this gas is furnished to the brain in the blood. If the blood supply fails, those forms of activity which we denominate consciousness, attention, volition, and thought, cease. This is easily proved by compression of the carotids. It is known that in the waking hours the muscles, as well as the nerves and the nerve-centers, as a consequence of that activity, produce substances easily oxidizable, among which is lactic acid. Some have even attributed the sense of fatigue which we experience after prolonged exertion to the presence of this acid in the blood.‡ According to Preyer, after the work of the day is done, and the quiet of sleep is sought, the waste materials of which we have spoken, and which he proposes to call *ponogènes* (substances which cause fatigue), being accumulated in the tissues, little by little undergo decomposition, by taking oxygen from the blood. They thus divert a considerable quantity of this gas from the cerebrum, the cells of which, deprived of this element so indispensable to their activity, enter into a state of relative repose. These waste matters are, then, the physical

cause of sleep, which will be the more profound and prolonged the more the blood is charged with the excrementitious products of function. Preyer has experimented on animals by injecting varying quantities of lactic acid into their blood, and has produced a deep somnolent condition which could not be distinguished from natural sleep. The use of lactate of sodium in the human subject has sometimes been attended with a like hypnotic effect. Further researches are needed before the question can be considered as settled.

THE CINCINNATI BOARD OF HEALTH.

BOARDS of health have been made up of queer material before now, but we confess to some surprise at the picture that the "Cincinnati Medical News" draws of a board recently created by the Common Council of that city. It is composed of nine persons, every one of whom, except one, a medical specialist, is a saloon-keeper—as our contemporary vigorously phrases it, a "beer-jerker." It seems that the Common Council had once before appointed a board of health, but that its composition was so vile that the Legislature abolished it, and authorized the Superior Court of the city to appoint a health officer. The failure of the court to make the appointment left the city without any sanitary official, and furnished an occasion for the Common Council to give fresh proof of its utter disregard of decency by creating the present board. The Chamber of Commerce has been led to move in the matter, and there is a fair prospect that the newly appointed board will be declared illegal, on the ground that the Common Council had no authority to create a board of health.

The journal from which our information is derived adds that the fault is with the citizens, who choose to ignore their political duties, and allow their prerogatives to be usurped and turned against them by a horde of "bummers." This is undoubtedly true, and not of Cincinnati only, but of almost every large city in the country as well. The sanitary branch of a municipal government is apt to prove a particularly easy prey to the cormorants termed politicians, owing mainly, it must be supposed, to the fact that the community at large look upon health officials as rather ornamental than useful, and hence care little into whose hands the offices fall. No doubt a smart visitation of pestilence would disperse this delusion in Cincinnati, as well as elsewhere, but our recent history does not encourage any great confidence that even such forced enlightenment is likely to prove lasting.

THE QUESTION OF QUARANTINE.

It is getting to be the fashion in some quarters to decry the practice of quarantine. Whether this tendency is to be taken as a surrender to the greed of trade, or as another flowering of Anglophilism, it is not easy to determine; nor is it profitable to speculate as to which of the two interpretations would cast the less discredit on those professed sanitarians who are continually emphasizing the need of cleanliness, as if that covered the whole field of sanitation. As a matter of fact, our sanitary officials do as a rule carry out all known measures looking to

* "Principles of Psychology," vol. i, pp. 88, 89.

† "Les causes du sommeil," "Revue scientifique," t. xix.

‡ Yung, *op. cit.*

the preservation of the public health to as full an extent as their limited authority and resources will allow of. Further than that, many of them conduct investigations that are of great value to preventive medicine. It is strange, therefore, that, whenever it comes to the matter of addressing the public, they so often choose the part of making it appear that sanitation is little more than scientific scavenging.

The President of the Board of Health of the State of Louisiana lately issued a proclamation, seconded by another from the Governor of the State, which, although stringent in the matter of quarantining arrivals off the city of New Orleans, we can not but regard as amply justified in all its details, in view of the threatening aspect of yellow fever on the Gulf, and of its repeated ravages in New Orleans. Our contemporary, the "Sanitarian," however, looks upon the terms of the proclamation as inhuman, and intimates that the rescue of an infected ship's company is a most important part of the beneficent work of modern sanitation. No doubt this is true, but, when it comes to the point that one or the other of two interests must give way—that of a limited number of persons on shipboard, already exposed to infection, or that of a great center of population—the terms that seem hard in President Jones's proclamation must be acknowledged as humane in their ultimate operation.

As for the action of the Health Officer of the Port of New York, who, as we recorded last week, lately took pains to inform a commercial organization that articles of merchandise might be so stored in ships carrying other goods from infected ports as not to call for their detention by quarantine, we can only look upon it as playing with fire, provided our understanding of his proposition is correct. In the face of such a disease as yellow fever, an efficient quarantine deserves more confidence than all other measures put together, and public opinion should not allow any laxity in its enforcement.

A GRADATION IN HONORS.

THE distinction of knighthood was graciously offered to a Dublin physician lately, but he declined to receive it. In view of the freedom with which the title of baronet has been bestowed upon members of the British medical profession of late, it is gratifying to observe that several of our English contemporaries applaud the Irish practitioner for refusing the lesser compliment, intimating that under the circumstances the offer looked like little less than an insult to the profession in Dublin. But now the "Spectator," chronicling the bestowal of baronetcies upon Dr. Andrew Clark and Mr. Prescott Hewett, gives signs of a rare talent for stroking a cat the wrong way when it says that "this will make the medical profession in Dublin still more angry," and that, when the Dublin men can produce a physician and a surgeon who have done as much as Dr. Clark and Mr. Hewett, it trusts "that they, too, will receive baronetcies."

Dr. Clark, says the "Spectator," "is undoubtedly quite at the head of his profession, and, if he had done nothing else, the service he has rendered in persuading middle-aged men and women not to over-eat themselves, and in showing them how

much less food and wine and tea they ought to take than they actually do take, is one quite inestimable, and deserves a certain ethical as well as medical recognition." From this we learn that the conferring of a baronetcy is an ethical recognition, and we are left to infer that there is some difference between a man's over-eating and his over-eating *himself*! If Dr. Clark has really contributed so powerfully toward preventing the depopulation of England as to have persuaded the men and women of that country, whether middle-aged or not, not to "over-eat themselves," the most rancorous of Dublin doctors will scarcely grudge him his baronetcy.

MINOR PARAGRAPHS.

THE FOOT AND MOUTH DISEASE.

WHILE he was of the opinion that the American quarantine system gave no security against the conveyance of the disease by persons attached to the quarantine stations, and by articles taken from the yards, Mr. Dodson recently stated in the British House of Commons, in reply to an inquiry, that it was an undoubted fact that the foot and mouth disease had been carried from England to America—thus confirming the statements made by the United States Treasury Cattle Commission, a summary of which we gave last week. He added that certain Canadian cattle now suffering from the disease at Bristol had been in contact with infected animals from Ireland at Liverpool. We understand that the veterinarians of Canada absolutely deny the existence of the disease in the Dominion. The Collector at Boston has made a report to the Treasury Department in regard to increasing the accommodations at that port for the quarantine of imported cattle. He says that the agricultural buildings and grounds at Concord, Mass., can be secured as a cattle station at an annual rental of \$1,000, and that they can be put in condition for the service at an estimated expense of \$4,000. These quarters will accommodate 560 head of cattle. The collector also says that he has received notice of the expected arrival of 360 head of cattle in the first week of September.

A CASE OF ALLEGED MALPRACTICE.

THE husband of a lady who died suddenly in New York on the 23d of July, while under the care of Dr. George W. Brooks, is now represented by the newspapers as entertaining a suspicion that the death was due to the effects of the medicines employed, and as about to take measures to ascertain the cause of death. The deceased was a daughter of Signor Susini, the singer, and the wife of a Dr. Hunter, who removed to New York from Detroit not long ago. According to Dr. Hunter's statements, as given in the newspapers, Dr. Brooks first prescribed some pills of ergotin, "macrotin" (a term applied by the "eclectics" to an impure resinous precipitate obtained by adding water to a saturated tincture of cimicifuga), and resin of podophyllum. This was on the 15th of July. Twenty-one of the pills were taken in the course of a week, and on the 22d of the month Dr. Brooks ordered a liquid preparation—what it was, Dr. Hunter does not know—to be given in thirty-drop doses at 1.20, 3.20, and 7.20 p. m. The lady went to bed rather earlier than usual that night, and woke her husband at about three o'clock in the morning, asking for a drink of water. Half an hour afterward the husband awoke suddenly, found his wife gasping, and in a few seconds perceived that she was dead. Dr. Brooks was sent for, and on his arrival ordered a hot bath. The husband avers that Dr. Brooks poured the remainder of the medicine into the sink, and

put the bottle into his pocket. Being asked his opinion as to the cause of death, he answered, "apoplexy," but, this being received with incredulity, said: "Well, call it cerebro-spinal meningitis." "You change your diagnosis quickly," the husband retorted; "and then," his statement continues, "we went through the horrible farce of placing a dead woman in the bath which had been prepared." The only additional statement of any importance is, that Dr. Brooks advised the husband not to have a post-mortem examination made on the arrival of the remains at Detroit.

Dr. Hunter states that it was this advice, given at the time the body was about to be sent to Detroit, that aroused his suspicions, and yet he must have entertained a sentiment akin to suspicion when he made his sharp criticism of Dr. Brooks's diagnostic accomplishments. Moreover, he did not have an autopsy made on the arrival of the body at Detroit, and he allowed considerable time to elapse before making the matter public. It is evident that a good deal of allowance must be made for the husband's perturbed state of mind. Dr. Brooks's name is not given in the "Medical Register," but he is registered at the County Clerk's office as a graduate of the Medical Department of the University of the City of New York.

CONTAGIOUS PLEURO-PNEUMONIA AMONG CATTLE IN CONNECTICUT.

LAST April a resident of the town of Salem, Conn., bought a cow in Jersey City. Whether the cow was recently imported does not appear. She was taken to Salem, and early in July pleuro-pneumonia appeared among the owner's cattle, and on an adjoining farm, causing three deaths in the herd first attacked, and one in the other herd. Both herds are now isolated, and a few of the animals are still suffering from the disease. The lungs of the dead cattle have been examined by Professor Liautard, of New York, and by Dr. Rice, of Hartford, a veterinarian, who have pronounced the disease to be "lung plague." A representative of the Treasury Department Cattle Commission has lately visited the farms, and the department does not apprehend a spread of the disease beyond its present limits.

THE HEALTH OF BOSTON.

FROM the Eleventh Annual Report of the Board of Health of the City of Boston we learn that during the year 1882 there was a decrease in the total number of deaths from zymotic diseases, notwithstanding the increase of population, and that the percentage of deaths from all causes was smaller than in any other year since 1874. As the board remark, this is a most gratifying exhibit, and speaks well for the comparative sanitary condition of the city. It is especially satisfactory to observe a marked decrease in the number of deaths from diphtheria, and in the proportion of deaths to the number of cases. There were only eight deaths from small-pox. Relief from the sewer stench that at times proceeds from the Charles River, the Back Bay, the South Bay, and some other localities, is not to be hoped for, the board state, until the great sewer is completed that is to take the sewage out to sea, and they very properly urge the prosecution of the work of building it with the utmost speed.

THE CHICAGO SMALL-POX MORTALITY FOR THE YEAR 1882.

By the Report of the Department of Health of the City of Chicago, recently published, it appears that during the year 1882 small-pox caused 1,292 deaths, a number greatly in excess of that set down to any of the other zymotic diseases except "diarrhoeal diseases," which latter caused 1,387 deaths. In view

of the well-nigh absolute certainty with which small-pox may be prevented, this can not be called a creditable showing.

THE ILLINOIS METHOD OF DEALING WITH QUACKS.

ACCORDING to an Illinois newspaper, one James I. Lightfall, known also as "Kansas Jim," "Rustic Jack," and the "Indian Medicine Man," lately made a visit to Illinois, where, by resorting to various catchpenny devices in the way of shows, he managed to do a thriving business for a time extracting teeth and selling "Indian" remedies. He sought to evade the vigilance of the State Board of Health by taking into his employ a practitioner who had been licensed by the board. On complaint of some citizens of Decatur, however, the employee's license was revoked by the board, and Lightfall was put under bond of \$500 for trial. Having filed his bond, he at once proceeded to resume his "practice," but, having learned that another action was to be brought against him, involving another bond of the same amount, he concluded to leave for a different field.

THE ASHES AND GARBAGE NUISANCE.

THE new President of the Board of Health of the city of New York is commended by the newspapers for having, as it is said, taken measures to enforce the ordinance requiring ashes and garbage to be placed in proper receptacles. If he will compel the thorough and systematic removal of the ashes and garbage, without much regard to the receptacles, he will deserve still greater praise.

DISGUISED TIPPLES.

IT is reported from Washington that the Commissioner of Internal Revenue, suspecting Hostetter's Bitters to be a tippie disguised as a medicine, has been confirmed in his suspicion by the report of a Government chemist to whom a specimen of the nostrum was submitted for analysis. The commissioner says that when the mixture is sold as a beverage a license must be paid, but when sold in good faith as a medicine none will be required.

A CURIOUS FOREIGN BODY IN THE THROAT.

A PHILADELPHIA surgeon recently found a bent and barbed piece of wire in a patient's throat, and at first took it to be a fish-hook. After it was removed, however, it proved to be what is known as a meat tack, resembling a double-pointed carpet tack, with both points barbed. It seems that shippers of Chicago beef use these tacks for fastening tags to meat, the points being driven into the meat by means of a blow with a hammer.

"PHYSIO-MEDICALISM."

"THE PHYSIO-MEDICAL JOURNAL," published in Indianapolis, complains that "physio-medicalism," whatever that may be, has not been given representation in the Missouri State Board of Health; and it calls upon the individuals of the sect to organize. "To secure our rights, maintain our principles, protect ourselves, become a power in the land, and establish scientific medicine," it says, "we must have organization."

THE "ANNALES DES MALADIES DES ORGANES GÉNITO-URINAIRES."

THIS is the title of a new monthly journal, several numbers of which have reached us. The last number, for July, contains the following original communications: 1. A clinical lecture

on Blennorrhagic Inflammations of the Urethra, by Professor Guyon. 2. The conclusion of an article on Hydro-hæmatocele from Rupture of the Tunica Vaginalis, by Professor Reverdin. 3. Rapid Epitheliomatous Degeneration of Fistulous Tracts following Urethral Stricture, by M. F.-P. Guiard. A number of clinical records, abstracts, etc., are also given. From the numbers issued thus far, the new journal must be characterized as of a high degree of excellence. It is edited by M. E. Delefosse, under the direction of MM. Guyon, Lancereaux, and Méhu, and published in Paris, by J.-B. Baillière et Fils.

THE ATLANTIC JOURNAL OF MEDICINE.

THE first number of this new monthly journal, dated August, 1883, has reached us, and we find it highly meritorious. The number contains two important communicated articles—A Review of the United States Pharmacopœia, by J. N. Willis, Esq., and a paper on Typhlitis and Perityphlitis, by Dr. R. B. Stover, both of which were read before the Richmond Academy of Medicine. These are followed by a number of selections and several well-written editorials. The journal is owned and edited by Dr. Robert B. Stover and Dr. Henry G. Houston, and published in Richmond, Va. It is announced that each number will contain sixty-four pages of reading matter. The first number exceeds the promise, for it contains seventy-six. We cordially welcome the new journal.

THE AMERICAN PSYCHOLOGICAL JOURNAL.

THIS is the title of a new quarterly journal issued by the National Association for the Protection of the Insane and the Prevention of Insanity. It is edited by Dr. Joseph Parrish, of Burlington, N. J., with Dr. C. L. Dana, of New York, Miss A. A. Chevallier, of Boston, Dr. W. W. Godding, of Washington, Dr. H. H. Bannister, of Kankakee, Ill., and Dr. J. C. Shaw, of Brooklyn, as associate editors; and published by the Messrs. Blakiston, of Philadelphia.

Two numbers, of 112 pages each, have been issued, and, so far as we can judge from their contents and from the mechanical make-up, the journal can not fail to prove a creditable exponent of the cause to which it is devoted.

FATAL EFFECTS FROM THE BEE'S STING.

THE "Nashville Journal of Medicine and Surgery" quotes a paragraph with this title from our issue of July 7th (crediting it, by the way, to the "Medical Record"), and adds the following from the "Southern Medical Record": "The editor of this journal is cognizant of a case of death resulting from the sting of a bee. In this case, however, there was evidently an idiosyncrasy, as the same party had narrowly escaped death on a former occasion from the same cause."

THE "MARSHALLTOWN MEDICAL REVIEW."

A SPECIMEN copy of this "quarterly publication of materia medica and therapeutics" has reached us. It contains nine pages of reading matter, including an editorial article on eucalyptol and an original communication on encalyptol. Three of the six advertising pages are devoted to Sander & Sons' eucalyptol, and the journal is edited by M. Sander, M. D. The subscription price is \$1 per annum; single copy, 50 cents. Marshalltown is in Iowa.

THE RISKS OF MASSAGE.

IN a recent number of the "British Medical Journal," Dr. Julius Althaus, of London, cautions his readers against the in-

discriminate use of massage. He quotes Busch, of Berlin, as recommending it chiefly in the treatment of deformities and of muscular pain, and adds his own impression that it can do good only in superficial affections. He has known it to do palpable harm in cases of disease of the central nervous system.

NEWS ITEMS.

INFECTIOUS DISEASES IN NEW YORK.—We are indebted to the Sanitary Bureau of the Health Department for the following statement of cases and deaths reported during the two weeks ending August 21, 1883:

	Week ending Aug. 14.		Week ending Aug. 21.	
	Cases.	Deaths.	Cases.	Deaths.
Typhoid fever.....	53	10	45	11
Scarlet fever.....	28	4	32	14
Cerebro-spinal meningitis....	2	2	3	3
Measles.....	36	16	20	10
Diphtheria.....	25	15	24	15

YELLOW FEVER.—The most important event connected with the progress of the disease that has happened since the account given in our last issue was made up is its outbreak in the Navy Yard at Pensacola. This was announced on Thursday of last week in a dispatch from Surgeon Owen to the Acting Secretary of the Navy. Up to Thursday of this week there had been eight cases, with three deaths, no new cases having been reported during the forty-eight hours preceeding that date. The outbreak occurred among a detachment of marines on guard duty at the yard, and prompt and well-directed measures were taken to seclude that force, with the object of preventing the spread of the disease to the naval forces or to the civil population. On Wednesday of this week, however, a house-to-house inspection ordered by the Surgeon-General of the Marine-Hospital Service revealed two cases in a sailors' boarding-house in the town. The patients were at once removed to the quarantine station, and the house and its contents were fumigated and surrounded by a guard. Surgeon Owen is among the sufferers, and we regret to have to announce that the latest advices represent his condition as critical. Assistant Surgeon William Martin was at once ordered to his assistance from New Orleans, together with a physician from civil life, Dr. Hargis. The Commandant requested a court of inquiry into the origin of the outbreak. A court was accordingly ordered, and convened on Wednesday. The detail includes Assistant Surgeon Martin.

On Thursday of last week a ship that had been infected with the disease was allowed to come up to port at Quebec, having landed her sick sailors and been disinfected at the quarantine station.

It has been asserted in Galveston that at least one case of yellow fever has occurred in New Orleans, and that the sanitary officials of that city invariably try to conceal the fact when the fever does appear there.

The Captain-General of Cuba has ordered all vessels leaving Cuban ports to provide themselves with bills of health from the local sanitary boards. Therefore, vessels coming from Cuba to this country will require two bills of health, as our Government recognizes only those issued by our consuls. This course on the part of the Captain-General looks like a mere grasping for fees.

Cases have been reported from Tampico and Panama during the past week. In Vera Cruz there were 477 deaths from the disease in the month of July.

CHOLERA.—The mortality from the disease in Egypt has abated steadily during the week, but a few cases are reported from Beyrut, in Syria. A man is said to have died in Quebec

last week from "Canadian cholera." The "Medical Times and Gazette," of London, learns that, in view of the possibility of an outbreak of cholera in Paris, 480,000 f. have been voted for building wooden hospitals in the bastions of the fortifications, to serve ultimately for patients with other infectious diseases.

SMALL-POX of a very malignant type is reported to the Surgeon-General of the Marine-Hospital Service as extensively prevalent at Tamatlan and Purificacion, Mexico, and in Guatemala.

ADULTERATED TEA.—The Government announces its determination not to allow of the importation of tea containing more than eight per cent. of extraneous matter. Six hundred packages of Japanese "tea dust" were lately rejected by the Government Examiner.

A CONNECTICUT PHYSICIAN IN DISGRACE.—Dr. John J. Griffin, of Hartford, is stated to have evaded arrest last week by resorting to flight. A warrant had been issued for his apprehension on a charge of bastardy and attempted abortion, preferred by a girl who professes to have been wronged by him on the occasion of her having called at his office for medical advice. As there is nothing to show that the doctor was aware of the legal action that had been taken, there is some ground for the hope that his absence may yet be explained as having no connection with the charge.

THE NORRISTOWN ASYLUM HOMICIDE CASE.—In the case of James Gaffey, the attendant charged with having caused the death of a Mr. Fiss by a brutal assault, a preliminary hearing was had in Norristown last week, and Dr. Chase, of the asylum, testified that Mr. Fiss died of pyæmia, the consequence of a broken jaw.

THE CHILDREN'S HOSPITAL, BOSTON, will hereafter receive patients under fourteen years of age who are sent to a hospital by the city authorities on account of injuries, such patients having heretofore been sent to the City Hospital.

A HOSPITAL AT NORTH ADAMS, MASS.—The town has appropriated \$15,000 for the purpose of building a hospital, and the plans for the building are said to have met with the approval of Dr. Alfred L. Loomis and Dr. William M. Polk, of New York, to whom they were submitted.

DR. C. H. COGGSWELL has been appointed Assistant Port Physician at Boston.

OBITUARY NOTES.

HOMER BOSTWICK, L. M. S. S. N. Y., died at his house in New York on Tuesday, the 14th inst., at the age of seventy-seven. In 1830 he came to New York from Ohio, his native State, and in 1837 he received a license to practice from the Medical Society of the State of New York. Several years ago he published a large work on venereal diseases, illustrated with colored plates. For a number of years he served with credit as colonel of a militia regiment. He was a member of the Medical Society of the County of New York.

ARTHUR D. EDGEComb, M. D., OF LANCASTER, MASS.—Dr. Edgcomb, who was a Brunswick graduate, died on the 9th inst., in his sixty-fourth year. He was born in Livermore, Me., and practiced in several towns in Maine until 1874, when he went to Lancaster. His death was due to Bright's disease.

GEORGE G. TUCKER, M. D., OF WESTFIELD, MASS.—Dr. Tucker died suddenly on the morning of Monday, the 20th instant, in his forty-seventh year. He was born in Warren, Mass., in 1834, and was graduated from the Medical Department of Howard University in 1855, having been for two years house-

pupil in the Massachusetts General Hospital. He held a high position in the profession, and was much esteemed for his social qualities.

E. GOVER COX, M. D., OF BALTIMORE.—Dr. Cox died on Sunday, the 19th instant, at Mountain View, Carroll Co., Md., at the age of sixty-three. He was born in Frederick Co., August 11, 1820, and in 1840 was graduated from the Medical Department of the University of Ohio, and in 1844 from the Washington Medical College of Baltimore. He was a member of the Medical and Chirurgical Faculty of Maryland and of the Baltimore Medical Association, and was prominently identified with several benevolent associations.

BENJAMIN W. WOODS, M. D., OF GOVANSTOWN, MD.—Dr. Woods died on Sunday, the 19th inst., in his sixty-seventh year, of cancer of the stomach, after an illness of several months. He was born in Anne Arundel, now Howard County, Maryland, and was a graduate of the Medical Department of the University of Maryland. August 21, 1838, he was appointed Assistant Surgeon in the United States Army, and was attached to the command of Colonel (afterward General) Zachary Taylor during the Florida war. Dr. Woods was a man whose energy and skill in the practice of his profession and whose social and benevolent qualities won for him many warm friends in all classes of society.

PROFESSOR PARROT, OF PARIS.—The death is announced of this eminent physician, well known from his contributions to the literature of medicine, mainly in connection with the diseases of children.

Proceedings of Societies.

COLLEGE OF PHYSICIANS OF PHILADELPHIA.

Meeting of June 6, 1883.

THE RELATIONS OF PAIN TO WEATHER, STUDIED DURING ELEVEN YEARS, OF A CASE OF TRAUMATIC NEURALGIA.—Dr. S. WEIR MITCHELL presented a report by Captain R. CATLIN, U. S. Army, on his own case. Dr. MITCHELL said:

In the "American Journal of the Medical Sciences," April, 1877, I described the case of Captain Catlin, U. S. Army, and gave the results of his observations on the relation of states of the weather to his own pain. These studies, suggested by me and carried out with care, at length became of equal interest to the observer, and, with occasional advice, he has continued to keep notes, until the record, with his comments, constitutes, in my opinion, a most valuable contribution to the strict science of medicine.

For full details of his case I must refer to my essay, but it is needful here to make a brief explanatory statement, so that what he now says may be comprehensible without reference to the former record.

In August, 1864, Captain Catlin, then in perfect health, had his foot crushed in battle by a round shot. There was no shock; the leg was amputated below the knee, and he was up and about in a month. Pain was felt early in the lost foot, and became severe within nine months.

I should perhaps state that, except as concerns pain, the observer is in admirable health, that his attacks are so definite as to coming and going as to create little difficulty in this direction, and that, from his former position as instructor in certain scientific branches at West Point, he is well qualified by train-

ing to pursue this difficult study. The weather reports of the signal office and his own, or the daily observations of others, have enabled him, from time to time, to relate these to his record of neuralgia, and by this method he has avoided the constant presence of daily thought as to what was about to happen in consequence of atmospheric changes. I may add that I never knew any man more free from unwholesome attention to his own ailments. Most of what I learned from our former study still stands unaltered by this much longer record; but there have

been some fresh and suggestive gains in the relation of pain to meals, to daily barometric changes, and to magnetic conditions. The diagrams are readily understood in connection with explanations given in the text, except those for the months of November and December, 1877, which we have given as an illustration of the method of study, and of the obvious relation of storms to pain.

The following is the report of the case for the past seven years, made by Captain Catlin:

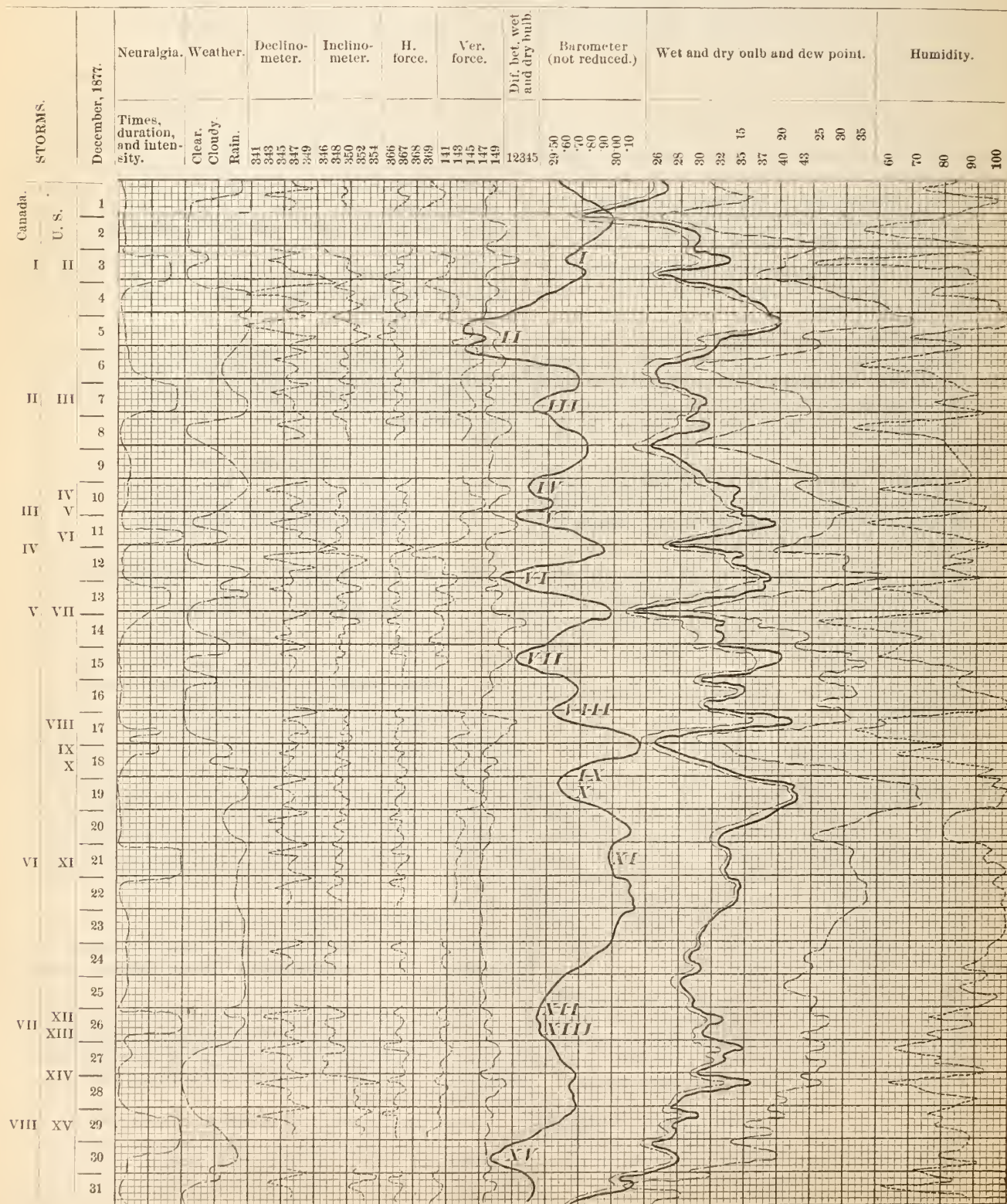


FIG. 1.

For the year 1872 there were 1,783 hours of pain (the records for 1873 and 1874 are incomplete); for 1875 there were 1,892 hours; for 1876, 1,790 hours; for 1877, 1,794 hours; for 1878, 1,591 hours; for 1879, 1,535 hours; for 1880, 1,567 hours; for 1881, 1,405 hours; and for 1882, 1,370 hours. From 1872 the annual amount of pain increased, and probably reached its maxi-

mum in 1874, a year of high pressure, which, as we proceed, will be found to have some relation to the pain. (See Table, Fig. 2.) For 1875 we have the highest recorded amount of pain (Fig. 3.) The next year, 1876, the amount of pain fell off 100 hours, with a decrease of the mean annual pressure, equal to 00.021 of an inch, with corresponding increase of temperature. For the

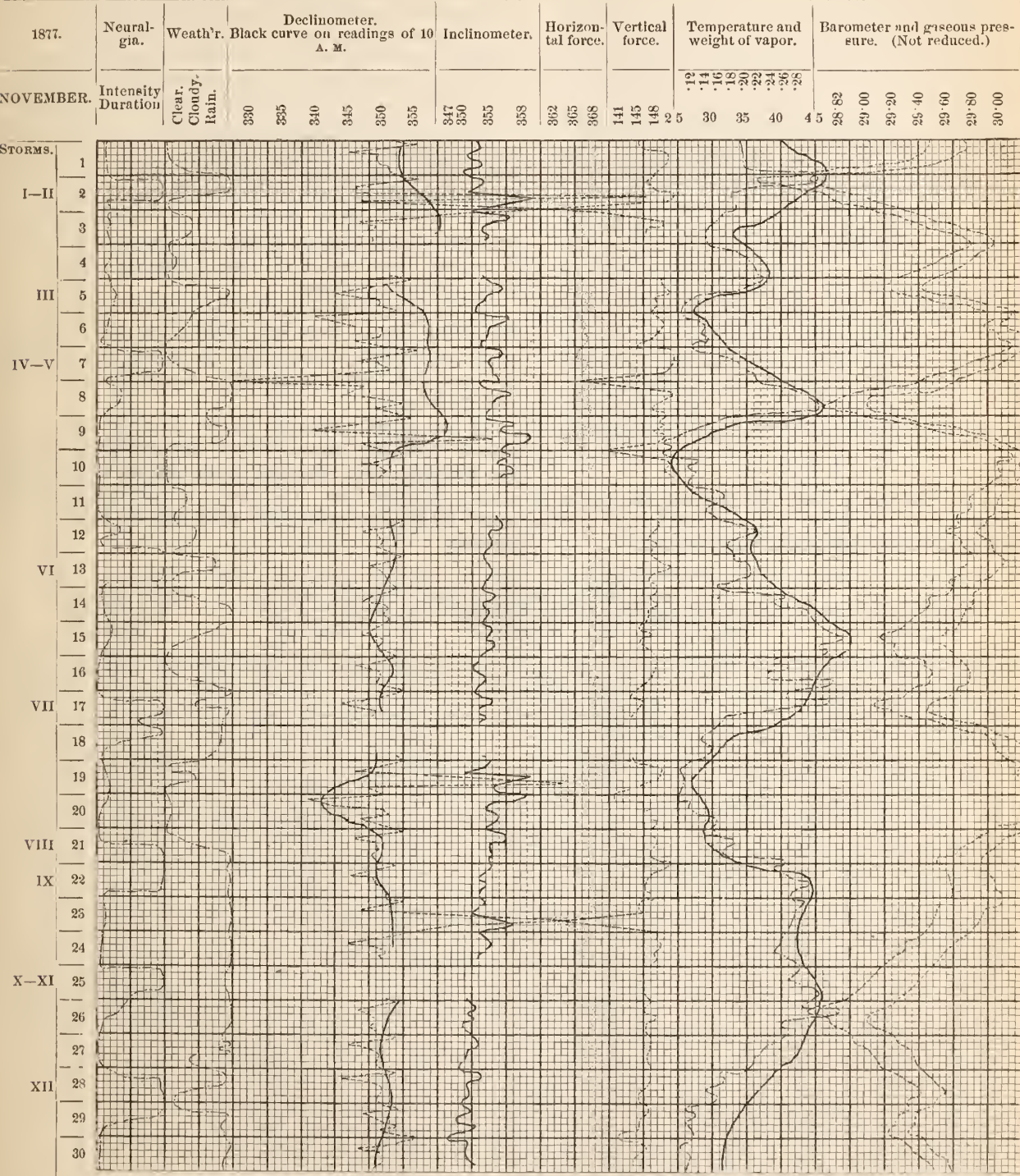


FIG. 2.

following year, 1877, the pain and pressure remained nearly constant and parallel, with some increase in temperature. For the year 1878 there was a remarkable lessening of 200 hours in the neuralgie amount, but, by following up the barometric curve, an equally remarkable fall is found. The annual mean of the barometer for the year 1878 was 00.068 of an inch below the mean of the previous year, and 00.067 of an inch below the

mean for the eight years, the mean for the eight years being 29.916.* From the low annual pressure of this year we may almost infer a high annual temperature, which we do indeed

* For these barometric records I am under obligations to Professor Daniel Draper, Director of the Observatory at Central Park, New York.

find in the curve, and the Signal Bureau reported for the Middle Atlantic the temperature "above the average" for every

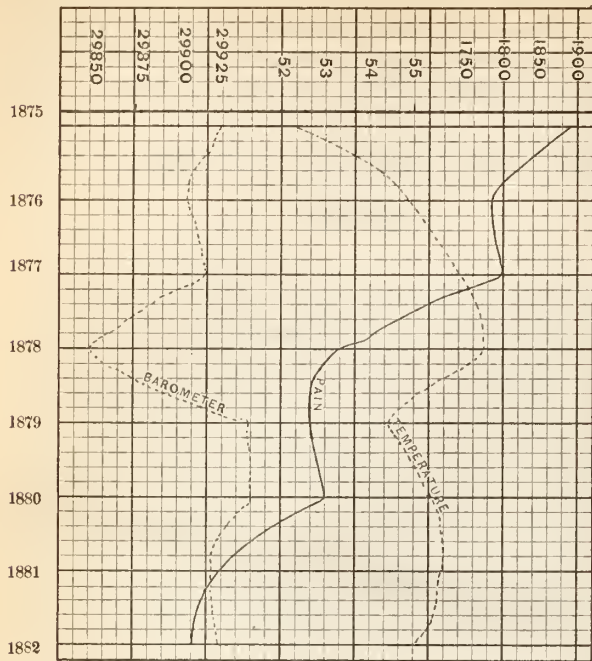


FIG. 3.

month in the year except June. For the year the number of pain attacks and the number of storms remained about normal, but the duration of the pain attacks was shortened.

This law of relationship of low pressure and high temperature to amount of pain, and the number of attacks of pain, and number of storms, will become more apparent when we come to the consideration of the quarterly and monthly distribution of pain and storm. Since 1878 the pain has diminished at the rate of forty hours annually, diminution being accelerated by a decrease of mean annual pressure and retarded (or actually held in suspension, as in 1880) by an increasing pressure. Making allowance for the annual decrease of pain, there is a remarkable parallelism between the pain and pressure curve. The yearly temperature bears the same relation to the barometer as it was found to have in the monthly fluctuations. The total amount of pain for the eight years ending January 1, 1883, was 12,944 hours, or nearly one fifth of the time. The distribution of the pain is shown by Fig. 4, I, which is the curve of the total monthly amounts for the eight years. It will be readily seen that the winter months hold the advantage as pain-producers, and that for this period while the sun was north of the equator there were 6,783 hours, against 6,161 hours while it was south of the equator.

Of the quarterly amounts, the first quarter, beginning with the winter solstice, leads with 3,538 hours, followed by the fourth quarter at 3,245 hours; then the second, with 3,098, and the least in the third quarter (July, August, and September) with 3,063 hours.

Of the monthly amounts, March holds the lead, closely pressed by January, and in order of amounts follow: November, December, May, February, April, August, October, September, July, and June. The number of storms (Fig. 4, II) recorded for the eight years is 806, taken from the Signal Bureau Records.

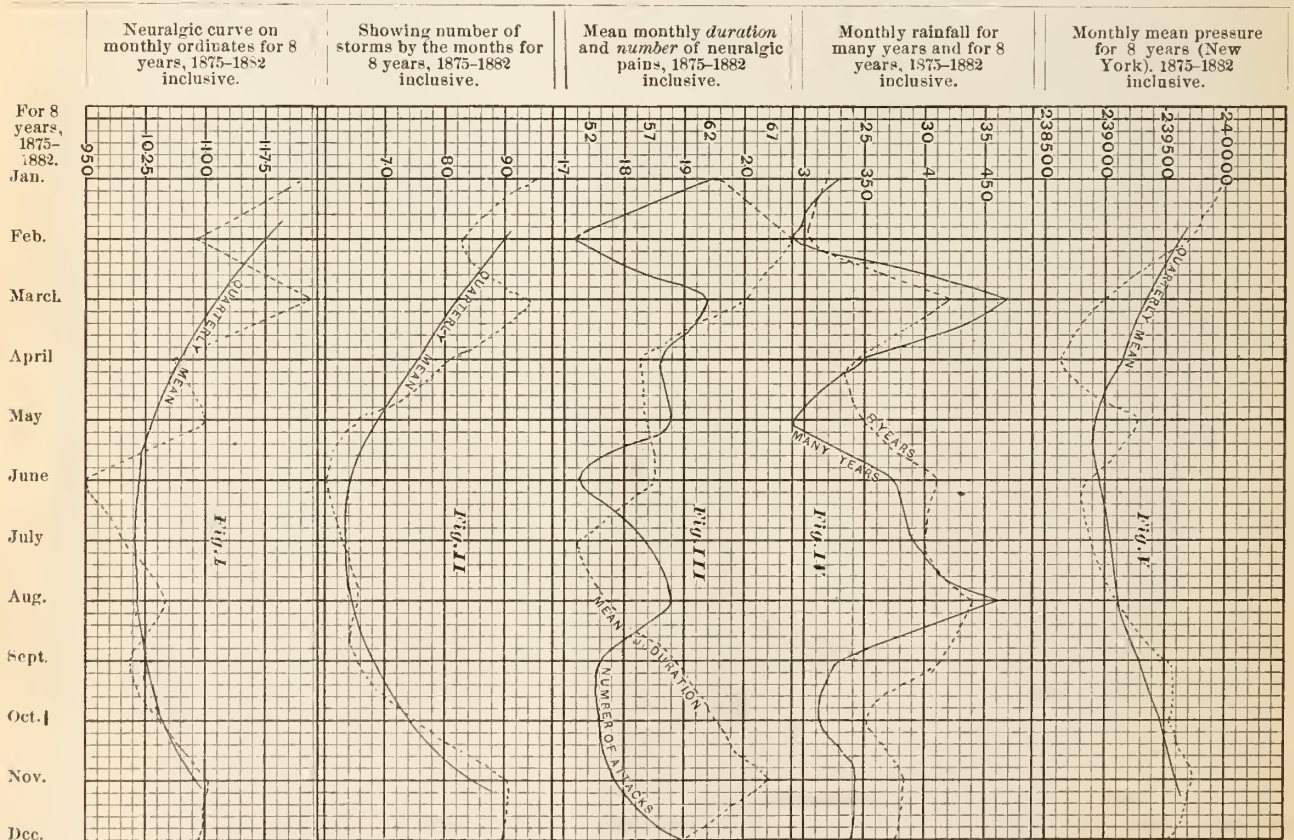


FIG. 4.

Of this number, 529 belong to the winters, against 397 for the summers.

The quarterly numbers, in like manner, correspond to quar-

terly amounts of neuralgia, and by a reference to the storm curve (Fig. 4, II) there is shown a remarkable parallelism throughout with the pain curve.

The average duration (Fig. 4, III) of each attack of pain for the whole time was 18·97 hours; but again we find average duration bearing a relation to amount of pain and number of storms.

The average for the first quarter was 20·1 hours, for the second quarter 18·4 hours, for the third quarter 17·9 hours, and for the fourth quarter 19·4 hours, which we see is directly proportional to storm and amount of pain. The average duration of pain was found to be greatest in February, 20·8 hours, one of the coldest, if not the coldest month, and containing probably the greatest barometric fluctuations of any month in the year.

Although the average velocity of translation of the winter storms be greater than the summer ones, owing to their much greater range and power, they are farther reaching, and, in consequence, produce longer attacks. The hottest month of the year (July) gave the least average duration of pain, being seven-teen hours.

The following table gives the full record for years and months of the amount of pain in hours:

TABLE OF MONTHLY AMOUNT OF PAIN 1875-1882, INCLUSIVE.

202 hours.	January,	1875	145 hours.	January,	1879
166 "	February,		131 "	February,	
189 "	March,		140 "	March,	
130 "	April,		121 "	April,	
182 "	May,		116 "	May,	
120 "	June,		150 "	June,	
122 "	July,		132 "	July,	
175 "	August,		133 "	August,	
105 "	September,		122 "	September,	
135 "	October,		121 "	October,	
190 "	November,		115 "	November,	
176 "	December,		159 "	December,	
— 1892			— 1535		
166 hours.	January,	1876	127 hours.	January,	1880
175 "	February,		132 "	February,	
188 "	March,		141 "	March,	
173 "	April,		122 "	April,	
158 "	May,		103 "	May,	
116 "	June,		117 "	June,	
111 "	July,		149 "	July,	
132 "	August,		121 "	August,	
155 "	September,		115 "	September,	
105 "	October,		174 "	October,	
160 "	November,		131 "	November,	
151 "	December,		135 "	December,	
— 1790			— 1567		
242 hours.	January,	1877	127 hours.	January,	1881
105 "	February,		121 "	February,	
188 "	March,		127 "	March,	
151 "	April,		120 "	April,	
141 "	May,		144 "	May,	
133 "	June,		107 "	June,	
123 "	July,		98 "	July,	
144 "	August,		118 "	August,	
166 "	September,		105 "	September,	
125 "	October,		89 "	October,	
140 "	November,		123 "	November,	
136 "	December,		126 "	December,	
— 1794			— 1465		
118 hours.	January,	1878	93 hours.	January,	1882
126 "	February,		128 "	February,	
152 "	March,		109 "	March,	
127 "	April,		118 "	April,	
133 "	May,		112 "	May,	
90 "	June,		114 "	June,	
131 "	July,		131 "	July,	
135 "	August,		102 "	August,	
114 "	September,		124 "	September,	
160 "	October,		129 "	October,	
145 "	November,		100 "	November,	
160 "	December,		110 "	December,	
— 1591			— 1370		

This is a month of low average pressure and unimportant and minimum barometric fluctuations. By an examination of the curve of the mean monthly number of attacks (Fig. 4, III)

there is found an almost exact *monthly* parallelism with the pain and storm curve, but the mean *quarterly* of the curve would not be as nearly parallel with the mean quarterly of the pain or storm, which shows that the number of attacks of pain is greater in proportion to the number of storms for summer than for winter. Many of the summer storms are difficult to trace, and some are not charted owing to their indefiniteness, but they are, nevertheless, pain-producers. For this reason it is believed that the relationship of the number of pain attacks to the number of storms is not as disproportionate as appears in the quarterly comparison of the curves.

Passing to the rain curve (Fig. 4, IV), we find it in harmony with the pain and storm curves, except for a few of the summer months. For these months, owing to the short and heavy precipitation of rain, and local character of many of the storms, the curve does not subordinate itself to the pain, storm, or even barometric curve.

Thus we see that rain-fall of itself is only relatively to be used as a measure for pain.

The barometric curve (Fig. 4, V), as it swings almost a catenary from January to December, measures, with the storm curve, much more accurately the ordinates of the pain curve; and here we have reappearing in the quarterly and monthly products of neuralgia the law already disclosed in the annual product of pain, viz.: high temperature, low barometer, favorable for non-product of pain; and, in addition, minimum barometric undulations, favoring diminution of pain duration.

(To be concluded.)

NEW YORK OBSTETRICAL SOCIETY.

A STATED meeting was held April 17, 1883, Dr. C. C. LEE, President, in the chair.

The minutes of the previous meeting were read by the secretary, and were approved.

DIPHTHERIA.—Dr. E. L. PARTRIDGE presented the trachea and larynx, the seat of diphtheritic exudation, removed post mortem from a child who died, at the age of eighteen months, at the Nursery and Child's Hospital. He gave the following history: The child's previous health was good; it was well nourished. On the morning of March 24, 1883, the temperature was 100° F.; there was croupy cough, and croupy breathing on inspiration and expiration. During the day the laryngeal symptoms increased. There was no vomiting nor depression; food was taken; no membrane was visible. Temperature in the evening 100°. On the twenty-fifth, A. M., temperature 100°, pulse 120, respiration 40. Laryngeal symptoms were more marked. In the afternoon the temperature was 99°, the pulse 120, respiration 42. Though vomiting was occasionally provoked, no membrane was seen. The child was restless during the night; respiration was more troubled. On the morning of the 26th the temperature was 99°, the pulse 140, respiration 42. Up to this time there had been no symptoms of importance except those pertaining to the larynx. It was even thought that catarrhal laryngitis might be the disease present. But the child now began to pick at its throat; the skin grew cyanosed; restlessness was very marked. At 12.30 P. M. the symptoms were so serious as to demand tracheotomy. The operation was attended with but little hæmorrhage. The pulse after the operation was 160, fair in quality, and soon fell to 144, remaining strong during the day. In the evening the temperature rose to 105°; dyspnœa increased; the lungs became somewhat congested. Large pieces of membrane were coughed up through the tube. At 7.30 P. M. there was impending suffocation. Convulsions occurred, and death took place at 8 P. M.

At the autopsy, the lungs were found to be much congested,

with partial collapse and purulent bronchitis. The heart was normal, the liver was soft and pale, and the mesenteric glands were enlarged. Throughout the entire course of the disease there had been no ocular demonstration of a false membrane except that which was coughed out through the tracheotomy tube. But at the autopsy the larynx showed very distinctly false membrane extending from the epiglottis to the bifurcation of the trachea, a lesion which could in no way be distinguished from that always seen in recognized diphtheria. Microscopical examination, made by Dr. Livingston, showed that the membrane consisted of coagulated fibrin, in the meshes of which were round cells of various sizes, and that the specimen presented all the characteristics of diphtheritic membrane. On reviewing the history, it would be seen that there had been almost entire absence of constitutional symptoms, the temperature being only 99° to 100° until an hour or two before death; the pulse strong throughout the course of the disease. There had been no indications of systemic depression, as from toxæmia; no membrane could be seen. The laryngeal symptoms were marked from the first. There was a history, therefore, of so-called membranous croup, while the autopsy showed a lesion of the larynx which could in no way be distinguished from that always seen in recognized diphtheria.

FREUND'S OPERATION FOR EXTIRPATION OF THE UTERUS.—Dr. B. F. DAWSON presented the uterus removed by Freund's operation, about twelve days before, from a woman fifty-one years of age, for cancer of the cervix. He first saw the patient about five weeks previously, when she was in very poor condition from loss of blood. The curette and the cautery had been used several times by himself and Dr. Keune, her regular attendant, with the result of checking the considerable hæmorrhage; notwithstanding all treatment, the patient was rapidly growing worse, and was anxious to have a radical operation performed. Careful examination showed that the disease was not limited to the cervix, but extended up to the body, yet no involvement of the neighboring lymphatics could be discovered. The operation was very tedious, and required two hours and forty minutes for its performance, but no accident occurred, except the wounding of a small vein, which was readily secured, and no unusual difficulties were encountered. The patient took ether badly, but at the end of the operation rallied, and it was believed that she stood a fair chance to recover. A change took place, however, and she died at the end of seven hours, evidently of shock. The speaker said that, in looking back upon the difficulties of this operation, the length of time required for its performance, the disemboweling requisite, the long abdominal incision, and the consequent danger to the life of the patient from shock, he felt convinced that it was an operation which should seldom if ever be undertaken, and he regretted that in the present instance he did not do the vaginal operation instead. Examination of the specimen showed the disease extending above the os internum.

Dr. P. F. MUNDÉ was glad to hear Dr. Dawson, after having had personal experience with Freund's operation, speak of it in terms of disapproval. He himself, he was pleased to say, had never had any personal experience with it, although he had witnessed its performance at the hands of others. The length of time required to do the operation, the amount of shock attending and following it, and the few chances of immediate or permanent recovery, made Freund's operation one which should seldom be undertaken in gynecological surgery; indeed, in his opinion, it was one which should be entirely tabooed. If total extirpation of the uterus were indicated and feasible, he could hardly imagine a case where the vaginal operation would not be preferable to that of laparotomy. The operation as performed by Billroth, Schröder, and Czerny—of re-

moving the diseased portion alone, when confined to the cervix, by a wedge-shaped excision—subjected the patient to much less risk of life from the operation itself.

The PRESIDENT concurred in the views expressed by Dr. Mundé, and said that the suggestion with regard to the indications for the operation made by Dr. Polk (who arrived later) at a previous meeting of the society deserved serious consideration. An operation of such severity as Freund's had proved to be, he believed should not be undertaken for a disease which, should the patient recover from the immediate effects of the operation, would almost certainly recur within a year or two. He had witnessed the operation in four cases, and in each instance the patient died within forty-eight hours. Certainly, where the cancerous growth involved only the cervix, the operation for removal of the diseased tissue alone, as suggested by Dr. Mundé, was the one which was indicated. This operation, which had frequently been performed by Dr. Emmet and others, gave present relief, and did not involve danger to life. Should hæmorrhage occur, it could be controlled by drawing down the cervix firmly and carrying a wire suture behind the bleeding vessel, as in the manner indicated by Dr. Emmet.

Dr. W. R. GILLETTE asked whether any of the members present had had any experience with the operation described by Dr. Sims a few years since in an article in the "American Journal of Obstetrics," that of removing as much of the diseased cervical tissue as possible with the curette and scissors, and then applying chloride of zinc, causing the remainder of the diseased tissue to come away in a slough. He had resorted to this method in a number of cases, both in hospital and private practice, and had found it of decided temporary benefit. The last case in which he had used it was that of a patient who lived in Greenpoint, in whom the disease did not extend higher than the os internum. She was greatly emaciated, cachectic, had had frequent hæmorrhages, and was looked upon as a dying woman. He cauterized the diseased tissue, and then applied absorbent cotton saturated with the chloride-of-zinc solution, of the strength recommended by Dr. Sims, and after nine days a slough came away, leaving a perfectly healthy looking raw surface. The patient afterward greatly improved, and no longer presented the countenance of one suffering from malignant disease. Some weeks afterward slight hæmorrhage recurred, and the operation was repeated. It could not be expected that the measure would prove more than palliative. In one case, however, he saw the patient two years afterward, and not a trace of the disease had returned. Serious hæmorrhage during the operation had occurred in but a single instance, in which it was controlled by the use of the tissue forceps.

The PRESIDENT referred to the method recommended by Dr. Noeggerath, of cauterizing the diseased tissue with the galvanic cautery, and subsequently, as often as granulations sprang up, removing them with strong mineral acids. By this means it was believed that epithelioma in the cervix could always be controlled.

Dr. MUNDÉ had employed the method described by Dr. Gillette in numerous cases, with good results. In one case the patient was in an extremely low condition, and was expected to die of septicæmia within a week. The improvement was so great after the operation that one could hardly recognize her. Secondary hæmorrhage had occurred in but one case, which had already been reported to the society. He believed that the danger from this source was less after the use of chloride of zinc than after that of actual cautery. Recently he had had a case in which he thoroughly seared the surface of an epithelioma of the cervix; all oozing ceased, a tampon was applied, but he was called up in the night on account of secondary hæmorrhage. The raw surface left by the slough from the chloride of

zinc application rarely heals over by healthy granulation, although every effort should be made to attain that end.

Dr. W. M. CHAMBERLAIN had had the same good effect temporarily upon carcinoma of the cervix uteri by the application of the zinc-chloride solution; it had never been followed by secondary hæmorrhage. He had, however, been troubled somewhat in making the application by the difficulty in preventing the escharotic coming in contact with the vaginal mucous membrane and leading to an eschar.

Dr. MUNDÉ described the method of applying the zinc chloride as proposed by Dr. Sims, which was a perfectly safe one.

Dr. W. M. POLK expressed his views with regard to the proper indications for hysterectomy, in remarks which will be found on page 201.

SECONDARY HÆMORRHAGE AFTER OPERATION FOR LACERATION OF THE CERVIX UTERI.—Dr. P. F. MUNDÉ related the following cases: The first case was that of a patient in whom he sewed up a lacerated cervix and perinæum, and did Stoltz's operation for cystocele. Catgut sutures were used on the cervix only. Arterial hæmorrhage occurred from one vessel, but was checked by the sutures. Six days later, profuse hæmorrhage occurred from the vagina, which undoubtedly came from the cervix, necessitating the use of hot alum-water, and finally ice-water and vinegar, which arrested the bleeding. Had this not been done, it must have become necessary to tear open the perinæum and tampon the vagina. Removal of the stitches subsequently showed that union had taken place.

The second case was that of a private patient, upon whom he repaired the lacerated cervix without any particular difficulty. While inserting a suture, an exposed pulsating artery was noticed. Eight silver-wire sutures were introduced. On the fifth day, the same day on which secondary hæmorrhage occurred in the first case, he was called to see this patient, and found arterial hæmorrhage so profuse that, after vainly endeavoring to check the bleeding by compressing the whole cervix with *pincés hémostatiques*, he found himself compelled to hastily tampon the vagina with flat alum tampons, whereby, fortunately, hæmorrhage was arrested. Probably the artery referred to had been gradually cut into by one of the wire sutures. The blood gushed from the external os. The sutures had since been removed, and the cervix found perfectly united. He wished to refer, first, to the danger of secondary hæmorrhage after trachelorrhaphy, and, second, to this recurrence as a counter-indication to doing both the perineal and cervical operation at the same sitting.

FIRST COITUS ATTENDED BY EXTENSIVE LACERATION OF THE WALL OF THE VAGINA, AND FOLLOWED BY PROFUSE HÆMORRHAGE.—Dr. MUNDÉ was called yesterday to see a girl, twenty-two years of age, whom he found pallid and anæmic from the loss of blood. She had been married the night before, and but a single connection had taken place. It was not attended by severe pain nor by immediate hæmorrhage, but some hours afterward she observed bleeding from the vagina, and sent for a physician, who gave ergot, but without benefit. He made no examination. Then another physician put ice into the vagina, but also without stopping the hæmorrhage. Dr. Mundé examined the hymen for the source of the bleeding, but found that it came from a point higher up. Introducing a Sims's speculum, the vagina was seen to be ruptured on the right side for a distance of about two inches and a half, extending from one inch above the intestines up into the right fornix. The uterus was retroverted. He assumed that there was a disproportion between the male and the female organ. The bleeding was checked by firm tamponade with cotton. Two years ago he had attended a case of profuse hæmorrhage from rupture of the hymen up into the

vagina along the urethra during first coitus, in which tamponade also was required to check the bleeding.

HENRY J. GARRIGUES, M.D.,

B. F. DAWSON, M.D.,

FRANK P. FOSTER, M.D., *ex officio*,

Committee on Publication.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

A STATED meeting was held March 22, 1883, the President, Dr. JAMES TYSON, in the chair.

CHONDROMA OF THE SKULL.—Dr. J. P. CROZER GRIFFITH exhibited the specimen. The patient, aged twenty-nine, had been admitted to the Presbyterian Hospital, Philadelphia, June 10th. He was and had been suffering from persistent and very severe frontal headache, and held his head thrown back upon his shoulders to the farthest extent. Examination revealed a tumor the size of a walnut upon the anterior portion of the vault of the skull. This had been recognized by the patient for from one month and a half to three months and a half. Just how long was uncertain, as his headaches were very much confused. He had suffered from headaches for twelve years. Ophthalmoscopic examination revealed double choked discs.

While in the house the tumor grew with great rapidity, and a new growth sprang up beside it. The larger one became soft and tender in spots. The patient became delirious, but coma and paralysis developed only three days before death, nineteen days after admission. The post-mortem examination revealed a large tumor upon the anterior portion of the vault, and consisting of a soft, red mass, but full of bone spicules, and to the right and connected with it a smaller, dense, hard, white growth. Apparently distinct capsules inclosed and separated the two. The periosteum covered both tumors. The entire growth was irregularly oval, four inches and a half long by four to five broad, and with one inch and a half for its greatest thickness. Removal of the calvaria showed that the greater part of the tumor was internal. Here it was divided into three lobules, of which two resembled the larger tumor in structure, while the third was more like the smaller external growth. The dura mater covered the internal projection. At points it was attached to the brain, and bone spicules penetrated into the brain substance. The length of the entire internal growth was four inches and a half, width four inches, and the greatest depression upon the brain two inches.

The tables of the skull within the tumor were destroyed, and the bone around the edge eroded for some distance. The brain structure did not appear to be altered. Microscopical examination showed it to be a reticular chondroma, with a large amount of imperfectly fibrillated and rather translucent connective tissue, forming small meshes in which were cells; some embryonic, but very many cartilage cells. The bone spicules were evidently newly formed, and the older tumor had evidently undergone an ossifying metamorphosis, and then had become vascularized, forming a soft mass, in which the spicules were imbedded. Clinically, the case was of interest, from the existence of so great a depression of the brain with so few signs of disturbance of its functions.

Dr. WETHERELL asked what was the condition of the lymphatic system: were the glands enlarged?

Dr. GRIFFITH replied that only the post-cervical were affected.

Dr. FORMAD had examined the sections about a year ago; it was true, as he says, the predominant cells were those which resemble those of fibro-cartilage. There were, however, many young cells—cells like giant-cells; but the majority of the sections had more the appearance of fibro-cartilage. The conclu-

sion to which Drs. Tyson and Formad came at the time was that it was one of the varieties of chondroma. As the specimen appears now, it is too soft for chondroma, but seems rather to be a chondro-sarcoma. To this would point the rapid growth and age of the patient. It is certainly not gummatous.

METASTATIC PNEUMONIA FOLLOWING A PISTOL-SHOT WOUND OF THE TEMPORAL BONE.—Dr. H. M. FISHER spoke as follows: The patient, H. G., aged twenty-six, from whom the specimens I present to-night were taken, was admitted to Dr. Lewis's wards, at the Pennsylvania Hospital, October 31, 1882, suffering from a pistol-shot wound of the right ear. The following clinical notes of the case were kindly furnished to me by Dr. J. H. Wills, resident surgeon to the hospital.

Examination of the wound with the Nélaton probe showed that the ball had passed through the posterior wall of the external auditory canal, and was firmly imbedded in bone about one inch from its point of entrance. The seat of the ball was distinctly located by the marking of the lead on the porcelain of the Nélaton probe.

A prolonged effort to extract the ball was deemed inadvisable on account of its close proximity to the lateral sinus. On account of the inflammatory œdema of the tissues around the wound, poultices were applied. Ptosis of the right lid and slight depression of the right corner of the mouth were noticed.

The patient remained in the hospital four weeks, during which time his general health appeared fairly good. He was permitted to go out on a pass, returned the following day with well-marked pleuro-pneumonia, and died ten days later.

The autopsy showed that the ball had penetrated the tympanic cavity and passed into the jugular fossa, where it was found imbedded. There was marked periostitis in the neighborhood of the wound, but no inflammation of the walls of the lateral sinus, nor of the internal jugular vein, was noticed.

I am inclined to believe that the infarcts found in the lungs and pleura owed their origin to numerous small thrombi that had been formed in the diploë of the petrous portion of the temporal bone, the venules of the diploë having become plugged as a result of the periosteal inflammation. These thrombi, becoming loosened in consequence of increased blood pressure, were washed out into some one of the adjacent sinuses, and so into the pulmonary venous circulation. The case is, I think, an interesting one, as showing the dangers attendant upon such injuries to the temporal bone, apart from any incidental injury to the brain or its membranes.

Sections of the heart, liver, spleen, and kidneys showed marked amyloid infiltration of these organs. Whether such marked changes could be induced in all these organs in the short period that elapsed from the receipt of the injury to the date of the patient's death is a question I would leave to other members of the society to decide. At any rate, so far as I could ascertain, no previous history of suppuration was elicited from the patient during the time of his sojourn in the hospital.

Appended are the notes of the microscopical examination of the different organs.

Lungs.—Vessels everywhere greatly dilated, and present numerous infarctions; the alveolar capillaries are also greatly distended, and their endothelium is swollen. Intra-alveolar spaces packed with lymphoid cells and embryonic connective-tissue cells. The alveoli contain accumulations of epithelioid, highly pigmented cells. These cells are generally found associated with exudative corpuscles in a delicate reticulum. These catarrhal intra-alveolar accumulations show in places a tendency to become organized.

The *pleura* is greatly thickened, its vessels dilated and infarcted.

Heart.—Muscular fibers show commencing fatty degenera-

tion, and there is marked amyloid infiltration of the walls of its smaller nutrient vessels.

Liver.—Cell-nuclei alone take carmine staining. Islands of liver-cells found in a translucent, nearly homogeneous hasement tissue. Evident amyloid infiltration of the walls of the finer hepatic arteries and biliary ducts.

Kidney.—The Malpighian corpuscles show stiffened capillary loops and little shrinkage from the action of the alcohol. The laminae of the arterioles are pustulous.

Homogeneous, translucent spaces are seen between the smooth muscular fibers of these vessels.

Spleen.—The lymphoid corpuscles of the pulp appeared to me to present an unduly homogeneous, translucent appearance. The smaller vessels show distinct amyloid infiltration of their walls. The Malpighian bodies also show a notable infiltration, having, in some cases, been converted into amorphous masses, which are semi-transparent, and show interspersed among them a few connective-tissue nuclei.

CASE OF ERYSIPELAS NEONATORUM. Presented by Dr. H. M. FISHER.—Was called, March 3d, to see a colored infant, one week old. The child was said to have presented no sign of indisposition until the day previous to my visit, when it suddenly became much agitated, refused to move, and was found to have difficulty in micturition. The tissues of the scrotum and penis were found to be swollen, and in a few hours a faint erysipelatous blush was found pervading their surface.

When first seen, the child was apparently moribund. I could detect no radial pulse, its lips were blue, its extremities cold, and it was in a semi-comatose condition. In the hasty examination I made in the small, badly-lighted attic, in which I found the child, I observed but did not attach due importance to the erysipelatous blush I found extending from the scrotum to the lower part of the abdomen. From the history furnished me, and from the œdematous infiltration of the legs, thighs, and eyelids, as well as of the scrotum and penis, I was inclined to look upon the case as one of primary acute nephritis, with secondary erysipelatous involvement of the œdematous tissues.

With this view of the case, I ordered that the child should at once be placed in a hot bath, and after the bath applied flannels, wrung out in hot infusion of digitalis, to the patient's loins, and administered a small hypodermic of pilocarpine. Marked temporary improvement followed this treatment; the child emerged for a short time from its semi-comatose condition, cried lustily, and urinated and sweated freely, and marked reduction of the œdema was also noticed.

The improvement was, however, of short duration; the child soon relapsed into its former apathetic condition. Death occurred at 11 P. M. The autopsy, made by Dr. McIlvaine, resident surgeon, eighteen hours after death, revealed rigor mortis pretty well established.

œdema of the tissues of the lower extremities, scrotum, and penis was noticed; there was a livid discoloration of the skin of the anterior inner aspects of both thighs, and slight sloughing of the skin of the lower part of the scrotum. The bladder contained about half an ounce of light-yellow, opaque urine. The urine obtained by tapping the bladder, post mortem, showed, on examination, an apparent volume of albumin equal to about one eighth of the column of urine in the test tube. Microscopically, blood- and pus-corpuscles were found in abundance, and a few highly granular tube casts. The kidneys were somewhat congested and lobulated, but their capsule was not adherent, and they did not, at least to the naked eye, present any other evidence of disease. The liver weighed 6 ounces, and was highly congested. The spleen weighed 1½ ounce, and was likewise congested, and its surface mottled. The lungs were pretty evenly congested throughout, but were everywhere crepitant, and floated on water.

The heart weighed two ounces, and presented, on the whole, a healthy appearance, but its posterior mitral cusp appeared somewhat thickened.

The post-mortem appearances leave, I think, but little doubt that the disease was peripheral in its origin, or, in other words, that the erysipelas was the starting-point of it. Probably some comparatively trifling cause, such as a slight abrasion of the skin of the serotum, sufficed, under the very unfavorable sanitary conditions in which the little patient was placed, to light the train of its disease, with all its complications.

The progress of the disease seems in this particular case to have been unusually rapid. If the mother's statements can be trusted, only thirty-six hours elapsed from its first onset till its fatal termination.

C. B. NANCREDE, M. D., *Recorder.*

Miscellany.

THE TRI-STATE MEDICAL SOCIETY will meet in English's Hall, at Indianapolis, on the 18th, 19th, and 20th of September, 1883, commencing at 9 A. M. Excursion rates have been secured on the following railroads: C., C. & I.; Cin., Ind'pls., St. Louis & Chicago; Cin., Wabash & Mich.; Ind'pls & St. Louis; I., B. & W.; Wabash, St. Louis & Pacific; Ind'pls & Vincennes; J., M. & I.; Pitts., Cin. & St. Louis; Vandalia, Evansville & Terre Haute; Ft. Wayne, Cin. & Louisville. The New-Denison, Grand, Bates, and Brunswick Hotels have reduced their rates for the occasion. For further particulars address Thos. B. Harvey, M. D., Indianapolis, Chairman of the Committee of Arrangements.

THERAPEUTICAL NOTES.—*Pomade for Eczema of the Face.*—M. Galewski ("Progrès médical," July 21, 1883) recommends the following preparation for those cases of eczematous or impetiginous eruptions which, in children, often accompany phlyctenular keratitis: R Oil of cade, camphor, aa, 25 centigrammes; red precipitate, 10 centigrammes; vaseline, 10 grammes. M. When numerous crusts are formed it is well to remove them with a suitable forceps, and to cauterize the surfaces thus uncovered with a light application of nitrate of silver, the excess of which is to be neutralized with a solution of salt.

Perchloride of Iron in the Treatment of Typhoid Fever.—M. E. Dinaud ("Union médicale," July 19, 1883) advocates the use of the perchloride of iron, not only in diphtheria, but also in typhoid fever. [In diphtheria he claims for it a specific action. See our issue of July 28th.] Although he does not pretend that the iron is a specific in typhoid fever, he believes it to be of great efficacy, not only in adults but in children. No single remedy so tends to relieve the impoverished condition of the blood, the torpor of the stomach, and the inflammatory and ulcerative changes of the intestine that characterize the period of decline. Some patients complain that liquid perchloride of iron causes a painful sensation in the pharynx, which they compare to that of a burn. If objection is made to it on this account, the dry perchloride may be given instead. This is now to be had in the form of *dragées*, a very acceptable preparation for administration. To children a drop of the liquid, well diluted, may be given in broth or in gruel, as often as the latter is taken. The remedy should be begun at the end of the second week and continued until convalescence is complete.

The Formation of Precipitates in Mixtures of Different Tinctures.—M. Pierre Vigier ("Gazette hebdomadaire de médecine et de chirurgie," July 13, 1883) calls attention to the precipitates that are sometimes formed in mixing tinctures. Physicians often prescribe mixtures of different tinctures to be taken by drops. Such mixtures are very often turbid, perhaps because the tinctures which compose them are made of alcohol of different strengths; perhaps because there is some chemical incompatibility in the substances mixed together. Sixty-per-cent. alcohol, which is nearly half water, dissolves the gummy matters of plants, which are precipitated by stronger alcohol. On the other

hand, eighty- or ninety-per-cent. alcohol dissolves the resinous matters, which are precipitated by weaker alcohol. In case a precipitate forms in any given case, the liquid can, of course, be filtered, but it is often not known what remains upon the filter. It is well, therefore, in mixing tinctures, to put together such only as are made with alcohol of the same strength. However, even this precaution will not always prevent the formation of precipitates. For instance, if equal quantities of the tinctures of calumba, of gentian, of cinchona, and of the bitter tincture of Baumé be mixed together, the resulting compound is turbid. It is found, by combining these tinctures in various ways, that the precipitate results from the reaction of the tinctures of calumba and of cinchona upon each other. The viscous material contained in the tincture of calumba is thrown down by the soluble principles of the cinchona. This precipitation may not destroy the value of the filtered mixture; nevertheless, it is better not to prescribe the two tinctures together.

Preparations of Aconite.—M. Oulmont ("Lyon médical," July 15, 1883) makes the following observations concerning preparations of aconite: The nitrate of aconitine will produce toxic effects in doses of a quarter of a milligramme (gr. $\frac{1}{240}$). Three milligrammes (gr. $\frac{1}{60}$?) will kill a good-sized dog. Crystallized aconitine will vary in its toxic action according to the origin of the aconite root from which it is made. One milligramme of Swiss aconitine will kill a dog in forty-three minutes; the same quantity from Dauphiney in ninety-five minutes; the same quantity from Vosges will not produce death. The alcoholic extract of the fresh stem and leaves is harmless up to twenty grammes. The alcoholic extract of the fresh roots and the tinctures of the dried leaves and of the dried roots are more powerful, but not equally so. Eight to ten drops of the homœopathic mother tincture will kill a dog. The alcoholic extract of the dried roots from Vosges is, next to crystallized aconitine, the preparation of the most even strength. The proportion of alkaloids depends much on the period of gathering the plants. The alkaloids do not act in the same manner as the preparations obtained from the entire plant. This is true of other active principles, for instance, of digitalin, the action of which is not identical with that of digitalis.

Lobelia Inflata in Thoracic Troubles.—M. Fourrier ("Lyon médical," July 15, 1883) recommends the use of the tincture of lobelia in dyspnoea due to mitral lesions and dilatation of the right heart, in pulmonary congestion, and in the third stage of phthisis. In catarrhal asthma a mixture, each dose of which contains one gramme and a half of tincture of lobelia and half a gramme of iodide of potassium, is said to be useful very often. Lobeline is a simple, non-crystallizable alkaloid.

THE APPOINTMENT OF EXTERNES IN THE PARIS HOSPITALS.—For the appointments to be made on the 1st of January, 1884, a *concours* will be held October 9th, at 4 P. M., in the amphitheatre of the *Administration centrale*. Students who wish to compete may register at the *secrétariat général* any day but Sundays and holidays, between eleven and three o'clock, from the 3d to the 27th of September, inclusive.

THE AMENITIES OF MEDICAL JOURNALISM.—A correspondent of the "Midland Medical Miscellany" says: "Some medical contemporaries have been inclined to sneer at, or damn, with faint praise, the 'Midland Medical Miscellany.' The amenities of medical literature afford much interest to the book-worm. The criticism on your journal is like the pouring of rose water, when compared with the outpourings of the early numbers of the 'Lancet,' on its rival journals. Here is a specimen of its facetious remarks on one of the papers published in 1828: 'A friend of ours,' says the 'Lancet,' 'was sitting lately in Callow and Wilson's reading-room, when that facetious wight Joe Burns entered and took up the first weekly exercise of Macleod's YELLOW FUNGUS; he had just raised it to reading distance, when he suddenly removed it from the neighborhood of his olfactory organ with a gesture and expression of face indicating strong disgust.' Joe was asked what he had got [*sic*] there? 'A bat's—' was the short reply, affording an unexpected confirmation of the naturalist's remark on the bat kind, '*Alvi dejectiones in hoc genere fœtore horribili imbutæ sunt.*' This specimen of good taste is outdone by the following: 'Some despicable imitations of the "Lancet" have arisen, *stunk*, and become extinguished;

one or two are still *emitting a like factor*.' If the 'Midland Medical Miscellany' had existed in those days, it would have shared in the abusive epithets so lavishly bestowed upon Earle, Keate, Travers, Sir Ben. Brodie, Dr. Johnson, etc. Fortunately, other times and other manners have come."

A HOMŒOPATHIC CURE.—The "Homœopathic World" reports a case of ulcer of the cornea ("perforating" according to the reporter) cured by a single dose of *silicea* 50 m. (T. C.). We are not well versed in this phraseology, but we are given to understand that this was a small dose, being a "50,000th centesimal attenuation"; also farther on (in riddle form) we are asked: "If the 30th T. C. corresponds to the *decillionth* of a grain, minim, or drop—and it does—what does the 50,000th correspond to?" We don't know, but we believe in this cure; and, with the caution that "*silicea* corresponds to the *right* eye and *sulphur* to the *left*," we commend this treatment to such of our readers as have a sufficiently robust faith to swallow it.—*Midland Med. Miscellany*.

THE INFLUENCE OF CALOMEL ON DIGESTION.—Dr. Vassilieff has found, from experiment, that the presence of calomel, at least up to the amount of five grammes, in the alimentary canal does not interfere with the gastric juice, nor affect the triple influence of the pancreatic fluid on albumin, fat, and starch; on mixing the latter fluid with fibrin and calomel, the formation of certain products, indol, etc., always appearing as a result of prolonged digestion under normal circumstances, is prevented. The gases generated in the process of pancreatic digestion contain none of the usual products of fermentation and decomposition when calomel is present; sulphuretted hydrogen and pure hydrogen are absent, carbonic acid is diminished to from two to ten per cent., while, under natural circumstances, from fourteen to fifty-four per cent. is found in the gases evolved by the action of the pancreatic fluid. In fact, calomel prevents all other changes in nutritious substances, save those produced entirely by the digestive secretions, decomposition and retrogressive processes in albumins being entirely checked. Calomel also prevents butyric-acid fermentation, as Vassilieff found by experiments on cheese. The action of calomel readily explains the cause of the green color of faeces passed by patients to whom that drug has been administered. Hoppe-Seyler rightly attributed this coloration to the presence of unaltered bile. Now, under normal conditions, bilirubin and biliverdin are changed, by a process of decomposition, into hydrobilirubin, and thus become no longer recognizable in the excretion; but this process is arrested by calomel, and the coloring agents, unaltered, give the faeces their peculiar bright-green hue.

These researches are described at length by Dr. Vassilieff in the "Zeitschrift für physiologische Chemie," vol. vi, page 112. He has found that this action of calomel is due to its power over the micro-organisms intimately associated with the process of decomposition which takes place in food during digestion. The drug prevents the development of micro-organisms in the digestive fluids, and also destroys any bacteria and micrococci already developed. This fact was proved first by artificial digestion. Vassilieff then made a series of experiments to find whether calomel had the same influence in natural digestion. Thirty grains of calomel were administered to a dog, in two doses, and the animal was killed a few hours later. Under all precautions, the contents of the intestines were then carefully analyzed. Neither indol nor phenol could be found; and it will not be forgotten, by those who study contemporaneous physiological research, that other agents—such as salicylic acid—prevent the formation of indol; and that pancreatic mixtures, formed from natural pancreatic juice, or infusions of pancreatic glandular tissue, undergo septic changes with very great rapidity, in spite of all precautions. None of these changes, nor any formation of indol, occurred in the food taken by dogs to which Vassilieff administered calomel. On the other hand, leucin and tyrosin were found in abundance. Under natural circumstances, these products of pancreatic digestion are so rapidly decomposed that they can not be detected in semi-digested food. Hence calomel has no influence on the action of the digestive fluids, but entirely prevents those true retrogressive and putrefactive changes whereby the highly unstable products of these fluids are rapidly decomposed, and micro-organisms quickly developed in great numbers. When calomel enters the alimen-

tary canal, leucin, tyro-in, bilirubin, and other substances remain unchanged, and bacteria are checked and killed.—*British Medical Journal*.

PERSONAL RESEMBLANCE AS A TEST OF PARENTAGE.—A case involving the question of legitimacy was tried not long since in Buffalo, and the defendant adjudged to be the father of the child. The points of the case are outlined in the decision of the Appellate Court, which reversed the decision: "Upon the trial the District Attorney asked of the mother of the bastard child, who was then a witness upon the stand, this question: 'Look at the child, and tell what the color of its eyes is?' This question was objected to by the defendant upon the ground that it was immaterial, incompetent, and improper. The objection was overruled, and exception taken by the defendant. The witness answered: 'Its eyes are blue.' We are of the opinion that this was an error. This evidence enabled the Court to compare the color of the child's eyes with those of the defendant, who was present in court. We do not regard this kind of evidence as safe or proper. In the case of *Petrie vs. Howe* (4 Thompson and Cook, 83) the question was as to the color of the child's hair. It was held in that case that such evidence was calculated to, and probably did, prejudice the defendant; that it was improper, and a new trial was granted. The argument used in that case in reference to the color of the hair applies with equal force in this case to the color of the eyes. Common observation reminds us that in families of children different colors of eyes and hair are common, and that it would be dangerous doctrine to permit a child's paternity to be questioned or proved by the comparisons of the color of its hair or eyes with that of its alleged parent."

THE APPEAL TO MEDICAL BOOKS IN COURTS.—The rule as to allowing medical books to be read or quoted from by witnesses on a criminal trial, or even used by lawyers in their arguments, varies in the different States. It was recently stated in a trial in a Western State that medical books could not be used in the courts of Indiana, Maine, Maryland, Massachusetts, Michigan, North Carolina, Rhode Island, Wisconsin, California, and New Hampshire. They can be used, however, in Iowa, Alabama, and probably a number of the remaining States. The theory upon which the exclusion seems to be based is that the jury might be drawn away, by the different theories presented in the books, from the proper consideration of the facts relating to the death as given by the witnesses of the deed.

ARMY INTELLIGENCE.—*Official List of Changes of Officers serving in the Medical Department of the United States Army from August 11, 1883, to August 18, 1883.*—BAXTER, JEDEDIAH H., Chief Medical Purveyor U. S. Army. To proceed to San Francisco, California, via St. Louis, Missouri, on public business connected with the Medical Department, and, on completion thereof, will return to his station. Par. 1, S. O. 185, A. G. O., August 11, 1883. — BURTON, HENRY G., Captain and Assistant Surgeon. Relieved from duty at Fort A. Lincoln, Dakota Territory, and assigned to duty at Fort Assiniboin, Montana Territory. Par. 1, S. O. 141, Department of Dakota, August 11, 1883. — BARNETT, RICHARDS, Captain and Assistant Surgeon. Granted leave of absence for one month, on surgeon's certificate of disability. Par. 2, S. O. 149, Department of the East, August 10, 1883. — BENHAM, R. B., First Lieutenant and Assistant Surgeon. Relieved from duty at Fort Assiniboin, Montana Territory, and assigned to duty at Fort A. Lincoln, Dakota Territory. Par. 2, S. O. 141, Department of Dakota, August 11, 1883.

NAVAL INTELLIGENCE.—*Official List of Changes in the Medical Corps of the Navy during the week ending August 18, 1883.*—Surgeon George A. Bright, ordered to temporary duty at Naval Rendezvous, Philadelphia, Pa. — Surgeon John L. Neilson, ordered to temporary duty on board Receiving Ship Franklin, at Norfolk, Va. — Assistant Surgeon William Martin, ordered to Navy Yard, Pensacola, Fla.

SOCIETY MEETINGS FOR THE COMING WEEK.—*Tuesday, August 28th:* Jersey City Pathological Society (private). *Wednesday, August 29th:* American Dermatological Association (Sagamore House, Green Island, Lake George—first day); Auburn (N. Y.) City Medical Association. *Thursday, August 30th:* American Dermatological Association (second day). *Friday, August 31st:* American Dermatological Association (third day).

Lectures and Addresses.

A CLINICAL LECTURE IN
GYNÆCOLOGY.

DELIVERED AT THE COLLEGE OF PHYSICIANS AND
SURGEONS,

BY T. GAILLARD THOMAS, M. D.,
PROFESSOR OF CLINICAL GYNÆCOLOGY.

Malignant Disease of the Cervix Uteri.—Laceration of the Cervix Uteri producing Sterility.

CASE I. MALIGNANT DISEASE OF THE CERVIX UTERI.—

GENTLEMEN: The name of our first patient is Sarah O. She is a native of the United States, fifty-four years of age, and has been married thirty years. She has had three children, but no miscarriages. The menopause took place nine years ago. In answer to our inquiries, she says that she has been an invalid for a year and a half. Eighteen months ago she began to suffer from very severe pelvic pain, which she describes as "twisting" in character, and also to have a discharge, sometimes bloody and sometimes watery, from the vagina, which with the pain has continued more or less constantly up to the present time. She also says that she has lost a considerable amount of flesh, and you can readily see that she has a distressed appearance, which might be due either to bodily suffering or mental worryment. The only other trouble of which she complains is the occurrence at times of more or less abdominal swelling. The true place to study symptomatology is the clinic, and not the lecture-room. This patient gives her symptoms clearly and graphically, and they are very significant.

We have now gone through what corresponds to the lawyer's direct examination of a witness, and are ready to begin the cross-examination; but in this case the patient has described her trouble so plainly that there is little need of any cross-examination. From her general statement we have already formed an opinion, and that is that the uterus is here the organ at fault; just as we should have suspected the lungs if the pain had been in the chest and the blood had been passed by the mouth. Before going further, I will state an axiom in gynæcology which is of great importance, and which you will do well to have firmly fixed in your minds. It is this: If a woman who has normally ceased to menstruate begins to have uterine hæmorrhage, always suspect carcinoma. Not infrequently you will see in the medical journals the reports of cases where women who have passed the change of life have begun to menstruate regularly again; but such accounts are altogether deceptive, and, if these cases could be followed out, it would be found, with scarcely a single exception, that the uterine flow was merely the indication of the presence of malignant disease. In other words, there is absolutely no such thing as a return of the menses when a woman has once reached the normal menopause. Not long since a patient of mine in the Woman's Hospital, who is sixty years of age, began to have a flowing from the uterus, and, as

there was no indication of any external disease, I applied the curette to the endometrium and drew out some pulpy masses, which I sent to a well-known microscopist for examination. The report that I got from him was that the growth was not malignant in any respect, but was simply a form of polypus. I am perfectly sure, however, that the microscopist is wrong, and for this reason: in the uterus of a woman of sixty, polypi never develop. The organ at that age is completely atrophied. Sometimes in women who have passed the menopause you will find uterine tumors which have all the appearance of fibroids. They are not by any means fibroids, however, but sarcomata. This, then, is a very important point to remember.

From the symptoms in this case we have good reason to suspect the uterus, and I do not care, therefore, to put any more questions to the patient before making a physical examination, especially since the pain which she has described so graphically is so entirely characteristic of the disease of which I have been speaking. Placing the woman on her back, I find, by conjoined manipulation, that the uterus has undergone the usual atrophy which takes place after the change of life. Upon the cervix, however, there is a hard and resisting mass, of irregular outline, which bleeds freely at the slightest touch. Then, turning the patient upon the side and introducing a Sims's speculum, I find that this mass resembles somewhat a large raspberry in appearance. This can be but one thing, and that is malignant disease. My experience with this affection has led me to make the remark, in my work on diseases of women, that if the physician makes the diagnosis of cancer of the uterus in any case, and attends properly to the diet, cleanliness, and comfort of the patient, in three months time his diagnosis will very probably be strongly disputed by the patient and her friends, on account of the improvement in her general condition, which has resulted from the supporting regimen which he has advised. In the vast majority of instances, however, there is, unfortunately, no mistake in the diagnosis, and the subsequent history of the case proves its correctness. So much for the diagnosis.

Little need be said as to the prognosis. You all know of how little benefit any treatment by medicine is in this affection. The science of medicine has existed since the days of Hippocrates, and all that we can say on this point after these thousands of years is, that there is no drug whatever which any physician but the wildest enthusiast ever gives with the slightest hope of any curative effect. Still, we do give medicines in such cases; but it is more for their moral effect than anything else. With surgery, however, the case is different. Unquestionably, in many instances this can do a great deal for the patient. Only yesterday I met a medical man from whose wife I removed such a growth as is here present, eight years ago, with the effect of arresting the further progress of the disease; and he told me that she was still perfectly well. In order to really benefit such a patient, it is necessary to remove the entire diseased portion of the uterus, however extensive that may be. Nine days since I removed a whole uterus, through the vagina, and the patient did perfectly well until forty-eight hours

ago, when septicæmia set in; and last night she died. I think this unfortunate result occurred, however, because I removed a drainage-tube at the end of twenty-four hours, instead of leaving it in position until all danger of septicæmia was past, and I believe that in another similar case it could be avoided. But the removal of the entire uterus, either through the vagina or by abdominal section, I need hardly say is a much more serious operation than ovariectomy. In cancer of the uterus it is highly desirable, then, to remove all the diseased portion, if possible. In the case now before you, unfortunately, this can not be successfully accomplished, because the vagina is involved in the disease. We might remove the entire uterus, but it would be of little benefit, as the trouble in the vagina would still remain. The treatment here, therefore, must be merely palliative; and we shall have done all that is in our power for our patient if we try to improve her general condition, and to render her as comfortable and cheerful as possible under the circumstances. I make it a rule never to tell a patient that she has malignant disease, unless there are special and urgent reasons for so doing. Such an announcement is like a death-knell to the unhappy woman, and, by its very depressing effort on her spirits, only hastens the fatal result.

CASE II. LACERATION OF THE CERVIX UTERI PRODUCING STERILITY.—Our next patient is Mrs. Anna P. She is thirty-four years of age, a native of the United States, and has been married twelve years. She has had two children, but no miscarriages, and her last child was born eight years ago. In answer to my inquiries, she says that she has been sick three or four years, that she has complained of pain in the back and side, and of nausea; and that is all, except some burning sensations about the hands and feet occasionally. On further questioning, I find that she is entirely regular in regard to her monthly sickness, but that she suffers a good deal from leucorrhœa, and that there is considerable irritation about the bladder, which obliges her to get up at least three or four times every night to pass her urine.

Before telling you what the physical examination revealed, I will merely mention that this is a totally different kind of a case from the last, in the fact that the condition present is an entirely remediable one. The patient lying upon the back, and my finger having been passed up into the vagina, I found that the cervix was of twice the normal size, and that the body of the uterus was also considerably enlarged, but not nearly to the same extent proportionally as the cervix. Furthermore, the cervix was found to be very much spread out, and its surface felt as if it were covered with a large number of millet-seeds. If one of these little protuberances was scraped with the finger-nail, a viscid liquid would issue from it which felt very much like white of egg to the touch. Finally, it was found that one lip of the cervix was pressing directly upon the bladder. The patient's position was now changed to the side, and a Sims's speculum introduced, after which the uterine probe was passed to the normal extent. Through the speculum it could readily be seen, however, that there was well-marked laceration of the cervix, and, when a tenaculum was put into each lip, the torn surfaces could be brought into complete

apposition. This laceration was absolutely the only abnormal condition present, as far as could be made out; and we have here, therefore, one of those simple cases which the gynecologist loves to meet with, and which usually yield the most admirable results.

Next let us inquire, Does this condition of laceration of the cervix account for the symptoms which are presented in the case? for if it is not really the cause of the symptoms of which the patient complains, our diagnosis is certainly wrong, and there must be some other pathological condition present which gives rise to them. The symptoms are, in brief, backache, pain in one side, dysuria, leucorrhœa, and nausea; and there is one additional one that should be mentioned, viz.: sterility, since she has not been pregnant now for eight years. It is impossible to say in which of her two confinements this woman's cervix was lacerated, as, from her account, neither of them seems to have been at all complicated; but it is probable that it occurred in the second. When the cervix uteri is in the condition that this one now is, it is almost invariably in a neuralgic state, and the pain is reflected through the uterine ligaments to the lower part of the spine, which accounts satisfactorily for the backache. In the examination, the left ovary was found to be tender on pressure, and this is to be explained also by the condition of the cervix, which keeps up a more or less constant oöphoralgia. The cause of the leucorrhœa is too evident to need any comment; while, as we have seen, one of the lips of the lacerated cervix is pressing directly on the bladder, which sufficiently accounts for the dysuria. All of the symptoms, including the sterility, are satisfactorily explained, therefore, by the diagnosis that has been made, and there certainly can be very little doubt that it is the correct one in this case.

Now as to the treatment. There is but one thing that can do any good in this case, and that is an operation for the restoration of the lacerated cervix to its normal condition. If the woman will consent to enter my service at the Woman's Hospital, she will be placed on preliminary treatment for ten days or a fortnight, and then the operation will be performed, this preliminary treatment consisting principally in the application of the hot douche and the careful regulation of the bowels. The operation for lacerated cervix—which, as you know, consists simply in paring the lips and keeping the denuded surfaces in apposition, by means of silver-wire sutures, until union has taken place—should always be done at least two weeks before the time for the menstrual period. Gynecologists in this country, at least, are fully satisfied as to the immense benefit often to be derived from this operation. In Europe there is at present manifested an extraordinary amount of opposition to it; but I am thoroughly convinced that, when its advantages come to be properly appreciated, it will be as completely established there as it is here. In the present instance, I doubt not, the operation will remove all the symptoms, including the sterility, and our patient will not only get well, but get well rapidly.

In conclusion, I wish to reply to a question which has just been sent me by one of the members of the class, viz.: Is there danger of cancer being propagated by means of

sexual intercourse? There is, undoubtedly, great danger of this occurring, and repeated instances of cancer of the penis being contracted in this way are on record. The slightest abrasion of the penis may be sufficient for the absorption of virus from the malignant growth, and the husbands of women suffering from cancer of the uterus should, therefore, always be warned against intercourse with their wives. This, as you see, is a matter of very considerable importance, and I am glad that the point has been suggested.

Original Communications.

ACNE:

ITS ÆTIOLOGY, DIAGNOSIS, AND TREATMENT.

By GEORGE THOMAS JACKSON, M. D.,
NEW YORK.

ACNE is an inflammatory disease of the sebaceous glands and the hair follicles of the skin, manifesting itself by an eruption of variously sized papules, pustules, or tubercles, generally confined to the regions of the face and shoulders, appearing usually about the age of puberty, and tending to run a chronic course.

ÆTIOLOGY.—As in other diseases, so in acne, we have predisposing and exciting causes. The great *predisposing cause* is found in the quality of the skin, its aptitude in certain individuals for developing that form of glandular inflammation with which we are now concerned. This quality of skin is most evidently present in persons of the lymphatic or strumous diathesis. Such individuals have pale, thick, muggy, more or less oily looking skins, with plainly visible pores. In many cases of acne the predisposing cause is not so clearly indicated, nor is there evidence of any diathesis; but it is necessary to assume in all cases some predisposition on the part of the skin, since we know that the same factors which in some people will act as exciting causes, in others will fail to give rise to the disease.

By some authors it is said that blondes are more prone to acne than brunettes, but the difference, if any, is small. How far hereditary tendency may be a predisposing cause is hard to decide, since the disease is so common that it would be easy to find a history of acne in some of the ancestors of almost every patient.

Exciting Causes.—The first great exciting cause is *puberty*. Then is the period of great developmental activity, the whole body undergoing marked change, nowhere more plainly seen than in the growth of the sebaceous glands and hair follicles. This physiological activity may act as an excitant to an outbreak of acne by becoming pathological, growth taking place too rapidly for the nutritive capabilities of the individual, and anæmia being caused. Then the nutrition and innervation of the sebaceous glands are interfered with, they receive a poorer quality of blood than they should, and their epithelia do not undergo the normal fatty change into sebaceous matter as in health. These

products of incomplete metamorphosis accumulate in the glands and their ducts, act as foreign bodies, and cause inflammation and acne pustules. Again, the rapid development of the hair and glands is attended by an increased flow of blood through the capillaries of the skin. At puberty, reflex nervous influences act easily upon the capillaries of the skin, and blushing is readily induced. The activity of the sebaceous glands is over-stimulated by the more or less constant hyperæmia, and, as a consequence, the sebaceous matter is formed too rapidly, is not cast off, but accumulates in the glands, and, becoming inspissated, acts as a foreign body and causes inflammation and acne.

Dyspepsia is a frequent exciting cause of acne. Gubler ("Lyon méd.," 1870, v, 341) believes that the chief relation between digestion and acne is a non-assimilation of fat on the part of the intestines and stomach; and Weisse ("Arch. of Dermat.," New York, January, 1876, p. 107) affirms in support of this view that fat people and beer drinkers are not so frequently affected with acne as others. Constipation is another frequent exciting cause.

Uterine and ovarian disorders of all grades, whether functional or organic, are frequent excitants and aggravants of acne. Many women with usually smooth skin are annoyed by the appearance of one or more pimples at each menstrual period. Many women have acne during pregnancy, and at no other time. The cases arising from disorders of the sexual organs in the female are among the most obstinate with which we have to do, and often our therapeutical art is powerless. Acne of the chin has been erroneously supposed to have uterine disease for its peculiar cause.

As to sexual excesses or over-continence as causes of acne, Niemeyer ("Text-Book of Pract. Med.," New York, 1876) says: "The laity go further, and, according as they are inclined to regard mankind from a gloomy or a favorable point of view, they ascribe acne to masturbation or sexual excess, or else attribute it to excessive chastity or over-continence." That excessive masturbation and venery may be exciting causes of acne in young people is quite likely, acting through their damaging effect upon the constitution and *morale* of the patient. That chastity should have such effect is extremely unlikely. Jonathan Hutchinson ("Med. Times and Gaz.," London, 1877, i, 17) believes that acne is due more to sexual irritability than to exhaustion, and more errors of innervation than of circulation.

Denslow ("N. Y. Med. Jour.," xxxiii, 1881, p. 189) believes that inertia or inadequacy of the non-striated muscles of the skin (*erectores pilorum*), one of whose offices is to empty the sebaceous glands, either alone or in connection with over-secretion of sebum and accumulation of the same in the glands, is an important factor in ætiology. He says that the muscles become inadequate when the glands are in a state of unusual activity, as at puberty or under local irritation, as heat, cold, etc.; and when some physiological or other constitutional disturbance causes interference with their innervation or blood supply, as at puberty, and with menstrual and intestinal disturbances.

General plethora may aggravate a pre-existing acne as well as a too hearty meal. That anæmia and chlorosis

should be exciting causes may be surmised from what was said under puberty as a cause.

Then there are certain drugs whose external or internal use will produce acne. Such are tar, bromine, and iodine. Tar, locally applied for its therapeutical effect, or coming in contact with the skin in its manufacture, will stop up the ducts of the glands and cause inflammation and acne. Sometimes it seems to produce acne by its systemic effect, the pustules appearing where the tar was not applied. Bromine and iodine, when taken into the system, are partially excreted by the sebaceous glands, and by their presence during the process of excretion act as irritants to the glands and cause acne pustules.

Comedones, plugging up follicles by extraneous matter, want of cleanliness, use of cosmetics, exposure to extremes of heat and cold, the rubbing of a greasy hat-band upon the forehead, or the related wearing of "bangs" on the part of the young women, are a few more causes of acne given by different writers, sufficient, no doubt, in some cases, to excite or aggravate the disease. Ohmann-Dumesnil ("St. Louis Med. and Surg. Jour.," xliii, 1882, p. 36) has recently brought forward the claims of renal disease to be considered as an ætiological factor.

As to the forms of acne, the more severe are apt to occur later in life than the milder, and to be more evidently related to disorders of the internal organs. Most cases begin between the ages of fifteen and twenty years, and tend to subside and disappear between the ages of twenty-five and thirty years.

Schwimmer ("Die neuropathischen Dermatosen," Wien u. Leipzig, 1883) places acne under the head of "superficial inflammations partly of tropho-neurotic nature."

DIAGNOSIS.—We will first consider the characters of the different forms of acne, and then pass to the differential diagnosis between it and other diseases with which it may be confounded.

Acne vulgaris is composed of three sub-varieties. 1. More or less acuminate elevations of the skin located about the mouths of the sebaceous ducts and hair follicles, pin-head sized, and of whitish or reddish color, forming acne papulosa. 2. Papules as just described, but with a minute blackish speck on their summit, indicating the mouth of the gland duct, constituting acne punctata. 3. The papule is surmounted with a yellowish-white pustular head, or has undergone degenerative changes into a pustule. The pustules are pin-head to split-pea size, are surrounded by a zone of inflammation, with some degree of induration at their base. This is acne pustulosa. Usually papules, papulo-pustules, pustules, comedones, and scars from old lesions form the typical acne vulgaris as it presents itself to the physician.

Acne indurata differs from acne vulgaris chiefly in the size of its lesions, and may be considered as an exaggeration of acne pustulosa. Its lesions are split-pea size and over, dark-red or violaceous in color, sometimes project quite prominently over the *niveau*, and sometimes may be felt as hard lumps under the skin. Suppuration goes on actively in them, and they not infrequently take on the form of dermic abscesses.

Acne atrophica and acne hypertrophica are really the

last stages or results of the other forms. In acne atrophica an atrophy takes place about the ducts of the glands, leaving minute pit-like cicatrices. This form is allied to the acne frontalis of the Germans, which is described as occurring mostly on the forehead, near the hair, in the form of tubercles or pustules, surmounted by a crust, which always heal with the production of circumscribed deep cicatrices. In acne hypertrophica there is a hypertrophy of the connective tissue about the glands, and the projection above the level of the skin of a persistent indurated papule or tubercle.

Acne artificialis seu medicamentosa, caused by drugs either locally applied or acting from within, has three principal varieties, named from their different causes: viz., tar acne, bromine acne, and iodine acne. This form of acne is apt to be more scattered over the body, and to appear in places where acne vulgaris is not seen. Tar acne exhibits a number of black points (the plugged-up follicles), together with inflamed papules and pustules, with more or less hyperæmia of the skin between. These lesions are located upon the exposed skin of those people who work with tar, or anywhere upon the body where tar has been therapeutically applied, as on the arms, thighs, etc. Bromine acne is composed of discrete inflamed papules, or the papules may be closely pressed together, forming infiltrated patches, and not infrequently there is ulceration. It is sometimes preceded by febrile symptoms. Though most frequently upon the face, chest, and back, it is a more general eruption than acne vulgaris, and is often found in the axilla, on the pubes, and on the limbs. Its lesions disappear, leaving sometimes brown pigmentation and often cicatrices. Iodine acne is more acute than acne vulgaris; its lesions are of more equal size and have more intensely red bases, and the eruption is generally accompanied by other symptoms of iodism. It is prone to appear on the face, back, shoulders, chest, and arms. The diagnosis of these forms of acne medicamentosa is further rendered easy by the history of a use of the different drugs.

Differential Diagnosis between Acne and Rosacea.—Rosacea is due to dilatation of the blood-vessels, hyperæmia, and subsequent development of connective tissue, the sebaceous glands being affected secondarily. Acne is primarily a disease of the sebaceous glands. Rosacea occurs usually in people over thirty years of age. Acne is a disease of youth, beginning between the ages of fifteen and twenty. In rosacea we usually have a history of some uterine, digestive, or other organic disorder, or of exposure to cold, drinking of spirits, etc. In acne in many cases no apparent cause can be discovered. In rosacea the eruption takes the form of more or less circumscribed reddish or bluish-red patches, with enlarged and prominent blood-vessels running through them, sometimes associated with acne pustules. In acne the eruption consists of more or less discrete inflamed papules and pustules, intermixed with comedones. Rosacea is usually confined to the nose and chin. Acne is scattered over the face and shoulders.

Impetigo is met with very frequently in young children. Acne is excessively rare before puberty. Impetigo is an acute disease preceded by constitutional symptoms. Acne

is a chronic disease without constitutional disturbances. The eruption of impetigo consists of superficial, rounded pustules, split-pea to finger-nail sized, and prominently raised above the surface of the skin. Acne pustules are accompanied by papules and comedones, and, if large, they become dermic abscesses, as in acne indurata. Impetigo either dries into a yellow scab, or, being ruptured, forms a thick brownish or yellowish crust. On healing, it leaves no pigmentation or scar. Acne does not form yellow crusts, and often leaves scars.

Sycosis is a disease of the hair follicles. Acne is principally a disease of the sebaceous glands. The eruption of sycosis consists of papules and pustules appearing on the hairy parts of the face and neck, more rarely on the scalp. Acne occurs on the non-hairy as well as the hairy parts of the face and neck, and does not occur on the scalp. Each pustule of sycosis is pierced by a hair, and the disease causes much crusting and sometimes loss of hair. In acne the pustules are not pierced by hair, nor do they give rise to alopecia, and there is not much if any crusting.

Variola is an acute disease, accompanied by constitutional symptoms, appearing on the general surface of the body, and consisting of uniform pustules which go through a regular course of development, becoming umbilicated, and ultimately breaking down with the formation of thick crusts. The whole course of acne is different. In any doubtful case, a few hours will decide the diagnosis from the course of the lesions.

PAPULAR ECZEMA.

Acne vulgaris.

1. Begins usually about the age of puberty.
2. A chronic disease confined usually to face, neck, and shoulders.
3. Consists of papules, pustules, and comedones, sometimes with much infiltration about the sebaceous glands.
4. Little tendency to grouping of lesions.
5. As a rule, does not itch, and no scratch marks.
6. Sometimes leaves cicatrices on healing.

Papular Eczema.

1. May begin at any age.
2. Though a chronic disease, it has more acute symptoms, and attacks, by preference, the arms, trunk, and thighs.
3. The papules are more apt to run into vesicles than into pustules, comedones are wanting, and the disease is more superficial.
4. May remain discrete, but lesions tend to form into patches.
5. Very itchy, and leaves numerous scratch marks.
6. Leaves no trace on the skin.

SYPHILODERMATA.

Acne vulgaris.

1. Begins usually at puberty.
2. Usually confined to the face, neck, and shoulders. Does not invade the scalp.
3. Usually accompanied by comedones, and find pustules and papules in all stages of development, without uniformity of size.
4. Color bright red, dark-red, or violaceous. Papules often surrounded by hyperæmic areolæ.
5. Pustules do not tend to break down and crust unless artificially ruptured. On pressure, a comedo plug will be extracted.

Papulo-pustular Syphilide.

1. Begins somewhat later, though it may appear at any age. Preceded or accompanied by other lesions of syphilis. Generally distinct evidence of venereal infection, and there may be systemic disturbance at the times of appearance of eruption.
2. A general eruption, often invading the scalp.
3. A greater uniformity in the character of the lesions. The pustules form on the top of papules.
4. Color more of the raw ham order. Less inflammatory. Papule often surrounded by a collar-ette of epithelium.
5. More tendency to rupture of themselves and dry into greenish-brown, adherent scabs. Sometimes ulcerate. No comedo plug.

6. No tendency to group.

7. Lesions disappearing generally leave no trace on the skin. Sometimes minute pit-like scars.

Acne indurata.

1. Appears shortly after puberty.

2. Special predilection for the face and shoulders; not usually found elsewhere.

3. Usually accompanied by acne vulgaris and comedones.

4. Discrete, large, dark-red or violaceous indolent tubercles which of themselves show little tendency to rupture, and less to ulcerate. Rather soft to the touch, and contain pus.

5. No tendency to grouping.

6. On healing, leave small pit-like cicatrices, or else no trace.

6. Tendency to group into segments of circles.

7. Tend to leave slight pigmented spot, which disappears in a few months. Where ulcers heal, cicatrices are left.

Tubercular Syphilide.

1. Appears somewhat later. May come at any period of life and with other symptoms of syphilis.

2. May come on any part of the body. Frequently on the forehead alone, at the roots of the hair.

3. Usually the only lesion, and very uniform in development. If early, it will be symmetrical; if late, non-symmetrical.

4. Dark-red or ham-colored tubercles surrounded by a well-marked areola, firm to the touch; often have a smooth, glistening surface, and do not contain pus. Often ulcerate.

5. Tend to group into more or less irregular patches, sometimes forming segments of circles, kidney shapes, etc.

6. If they have lasted long, they tend to leave pigmented and punched-out cicatrices with well-marked areola. Pigmentation and areola slowly disappear, and white scar remains.

TREATMENT.—In the treatment of acne we use internal, or constitutional, and external, or local, remedies.

In the *constitutional treatment* of acne we strive to follow the same indications as in general medicine, endeavoring to restore the body to proper tone. To anæmic patients we administer tonics—as iron, quinine, cod-liver oil, etc. Strumous patients improve under iodine, with cod-liver oil or other tonics. The sirup of the iodide of iron, and the iodide of starch, are specially suitable. To the plethoric, depletives should be administered. In cases where there seems to be sluggishness in the processes of waste and repair, acetate of potassium, in fifteen-grain doses, given three times a day between meals, and in a wineglass or more of water, does good.

For constipation, give such directions as to regulation of food, etc., and use such remedies as you would use in other cases. When we have to treat a patient with furred tongue, dyspepsia, and tendency toward constipation, the following combination will prove useful, viz.:

R Magnes. sulph., $\bar{z}$ iss.
Ferri sulph. exsic., gr. xvj.
Ac. sulph. dil., 3 ij.
Aqueæ, $\bar{z}$ viij.

M. Sig. $\bar{z}$ ss. in a goblet of water once or twice a day.

If dyspepsia is marked, the dilute mineral acids, tincture of nux vomica, and the bitter infusions, will be useful. Of late I have had good results from a plan of treatment advocated by Lenbe (Volkmann's "Sammlung klinische Vorträge," No. 62), and would commend it to the profession for further trial. His plan is to give dilute hydrochloric acid, in six-drop doses, one hour after each meal, and then again three hours after that, so that six doses of the acid are taken each day. The diet must be regulated. Uterine disorders must be treated when present, and their

cure will often be attended by the cure of the acne. We often see in our female patients with acne that, after marrying and giving birth to a child, the eruption, which before seemed to laugh at our endeavors to cure it, will completely disappear, fading away of itself.

General hygienic principles should be inculcated in all cases. Plenty of exercise in the open air is essential. In some cases, having the patient get thoroughly sunburnt by exposure to the sun and wind for a few days will greatly improve the face. Cold sponge baths in the morning are to be recommended. Russian, Turkish, and sulphur baths are good, and their effect is nowhere more brilliant than in acne of the back and shoulders.

Arsenic, calcium sulphide, glycerin, and ergot deserve special mention as drugs addressed to the nutrition of the skin. Arsenic is of benefit in the more chronic form of acne, where there is not much activity of pus production. The dose to begin with should be three to five drops, Fowler's solution being the preparation used, gradually increased to twenty drops, three times a day, watching the effect carefully, so as to avoid poisoning. Calcium sulphide (calx sulphurata) is highly spoken of by Ringer, Piffard, and others. Piffard ("Jour. of Cutan. and Ven. Dis.," New York, January, 1883) says that the dose of the drug must be proportioned to the state of the acne and the effect produced. In some cases gr. $\frac{1}{100}$, once or twice a day, will cure, while in others a full grain, repeated with sufficient frequency to provoke the physiological action, will be necessary. Further, he says: "In cases of acne simplex, with acute pustular lesions, the smaller dose is the most appropriate, and should not be too long continued, while in sluggish papules, occurring in lymphatic subjects, $\frac{1}{10}$, $\frac{1}{2}$, or even $\frac{1}{2}$ a grain should be given, with frequent repetitions, and until pustulation is imminent. When this point is reached, the drug should be discontinued. At this juncture amendment usually commences. This may continue for some days, and until the effect of the drug wears off. A renewal of the medicine again brings on a semblance of acuteness, and, when this subsides, improvement is further manifested." Thus he administers and leaves off the drug till the cure is complete. The use of glycerin was first advocated by Gubler, upon the theory that acne was due to a malassimilation of fat, and he administered the drug in the hope that it would, by increasing the amount of fat in the blood, prevent the inspissation of the sebaceous matter in the glands. He gives it in doses aggregating one half ounce a day. This plan is also followed by Weisse ("Arch. of Dermat.," New York, January, 1876), who administers the glycerin with tincture of gentian, and orders plenty of fatty food and malt liquors in the dietary. Ergotin, according to Schwimmer, of Buda-Pesth, was first introduced to the profession as a remedy for acne by Rossi and Lombroso, of Italy. Denslow, of this city ("N. Y. Med. Jour.," xxxiii, 1881, p. 189), also recommends the fluid extract of ergot, in 3 ss. doses, to act upon the unstriped muscular fibers of the skin and overcome their inertia. Hardaway, Heitzmann, Hyde, and others have spoken well of this plan.

Local measures are of as much importance in the treatment of acne as general therapeutics, if not more. It is

the aim of this article to mention only a few plans of local treatment which promise the best success.

Surgical measures, if not absolutely essential, will hasten on a cure. The instruments of use in acne are: 1. A sharp-pointed, straight bistoury; or, better, an acne-knife consisting of a short, broad, double-edged, triangular blade, with a prominent projecting shoulder about an eighth of an inch from the point. 2. A comedo-presser, which may be Piffard's, like a modified fenestrated watch-key; or Fox's, a straight silver tube, the one I prefer; or else an ordinary watch-key. 3. The dermal curette. Every pustule is to be freely incised with the bistoury and its contents pressed out by the thumb-nails. In patients who will allow it, and especially in cases which have lasted a long time, the dermal curette is one of the best and speediest means of getting rid of the pustules. Behrend ("Deutsch. med. Wochenschr.," xx, 1881, p. 283) recommends its use every second day at first, and then every third day, being careful at every sitting to scrape away all the crusts left from the previous sitting. The curette will only attack the unsound skin, and will do no harm to the healthy skin, nor leave any unsightly scar. If only a few isolated papules are to be destroyed, the smaller-sized curette should be selected. But, if a large surface is to be gone over, choose a large-sized curette. This should be held firmly in the hand and passed rapidly over the papules and pustules, the bleeding being encouraged by the application of hot water. Patients fearing disfigurement from the use of the bistoury or curette should be assured that either there will be no scars left, or there will be far less scarring than if the pustules were left to themselves.

All comedones should have their central core pressed out by means of one of the comedo-pressers spoken of above. Usually firm pressure made perpendicularly over the comedo will be quickly answered by the expression of the plug. If they prove obstinate, they will yield more readily after steaming the face for a few minutes, or washing it in hot water.

In very inflamed acne, soothing measures may be called for, either lotions, such as the "lotio calaminæ et glycerinæ" of Bulkley's "Manual of Skin Diseases," viz.

R Pulv. calaminæ præparatæ, 3 ss-j.
Zinci oxid., 3 j-ij.
Glycerinæ, 3 j-iiij.
Aq. rosæ, 3 iv.

M.

or ointments, such as the ungt. zinci oxid., or ungt. rosæ.

But usually more stimulating measures are needed. In a majority of the lotions for acne, sulphur in some of its forms plays the leading part, and in varying strength, from 3 ss. up to 3 ij to the ounce of excipient. Mercury is also used, as the bichloride, gr. $\frac{1}{4}$ -ij to the ounce. In very sluggish cases and in acne indurata good results may be expected from mercurial ointments, and of these a very good one is:

R Hydrarg. ammon., 3 j-ij.
Hydrarg. chlor. mitis, 3 ij-iv.
Petrolati, 3 j.

M.

Sulphur ointment may also be used, though its effect must be watched.

The treatment by green soap frictions is an excellent one. The simplest mode of using the soap is to order equal parts of *sapo viridis* and alcohol, and to have this well rubbed in on a piece of flannel once or twice a day, and then washed off with warm water. If the disease is very indolent, the soap can be left on all night and washed off in the morning. After a few days this treatment will cause a great deal of irritation, and the skin will peel off. Now stop the frictions and apply *ung. zinci oxid.*, or any simple ointment. Usually when the skin resumes its normal color the acne will be less marked. If necessary, repeat.

Living ("Lancet," 1878, i, p. 83) recommends that the soap frictions be followed by a sulphur lotion, such as:

R Sulphur præcip., $\bar{z}$ j.
Glycerinæ, 3 ij.
Alcohol., $\bar{z}$ j.
Aq. rosæ,
Aq. calcis, āā $\bar{z}$ iij.

M.

This is to be left on all night. If it is not well borne, he substitutes for it the following:

R Calaminæ,
Bismuth. subnitrat., āā 3 ij.
Alcohol., $\bar{z}$ ss.
Glycerinæ, 3 j.
Hydrarg. chlo. mit., gr. iij.
Aq. rosæ, $\bar{z}$ viij.

M.

Sand frictions have been recommended, but they are not so elegant or efficacious as the soap treatment or the curette. Some dermatologists recommend touching the pustules, after opening them, with some strong acid on a glass rod. McDonnell ("Canada Med. and Surg. Jour.," March, 1880, p. 351) reports a case of acne indurata cured by chrysophanic acid, gr. xv— $\bar{z}$ j. It is to be remembered that chrysophanic acid is very irritating to the face at times.

If a case is recent, and quite inflammatory, it is well to open all pustules and direct the patient to bathe the face in hot water, or hot water with borax (3 ij—Oj), before going to bed, by sopping the water on for five or ten minutes, and then to apply the soothing application chosen. In the morning wash off the lotion with cold water and apply some starch powder. These ablutions with hot water are to be used before the application of any lotion or ointment.

Many cases will be very obstinate and resist our best efforts. Most cases require weeks or months for a cure. If marriage is proposed, we can give our sanction, and assure the patient that, after regular sexual intercourse in moderation is established, the acne will be likely to disappear. In women child-bearing will often prove more curative than any other agent. But no physician is justified in advising illicit sexual intercourse to a man any more than to an innocent girl, and the latter he would hardly dare to do. Such advice would be derogatory to the high moral tone which a physician of all men should maintain, and most probably would fail of doing any good to the disease. At any rate,

the danger involved is far too serious to be assumed for so trivial an affair as acne.

14 EAST THIRTY-FIRST STREET.

THE PATHOLOGY OF ACUTE LOBAR PNEUMONIA

FROM A NEW STANDPOINT.

By WILLIAM D. SCHUYLER, M. D.

(Continued from page 209.)

Professor Flint's statements are most affirmative. He says: "From the relatively excessive amount of the exudation, its derivation from the branches of the pulmonary artery, its complete removal by absorption and expectoration, an extension of the local affection to a second or third lobe, and the laws of the disease as regards the greater liability of the lower lobes, and of the lower lobe of the right lung—these are points" (he says), "which, to say the least, are suggestive of dependence upon a constitutional morbid condition, the latter being essentially the disease." "It is not easy to reconcile the pathological facts just stated with the doctrine that the pneumonic products are the result solely of a local inflammatory condition; and, if a prior constitutional condition be essential, that condition is a fever." In support of which deduction he further says: "The local affection is never produced by local causes; and all the knowledge which we at present have of the causation is in favor of the primary action of the cause being constitutional." Also: "The disease, as well known, is not infrequently an intercurrent affection in the course of the essential fevers—namely, typhus and typhoid fevers, measles, and diphtheria. In these instances the determining cause is constitutional." Having thus established the constitutional origin of the malady, this author goes on to say: "Ætiological proof of a *specific* causation is afforded, first, by the prevalence of the disease at certain seasons of the year—namely, in the vernal months in this climate; second, by the fact that it is far more prevalent in some climates than in others, to wit, in the Southern than the Northern States in this country." "To these facts is to be added, that at different periods and places the variations of the disease as regards its phenomena and fatality, while they constitute a point of distinction from the purely inflammatory affections, affiliate it with the essential fevers." The clinical history, character of the chill, the sudden rise of temperature, often out of proportion to the local disease, time of deferescence while resolution is not yet complete, or has merely begun—which sometimes begins and ends within twelve hours, showing self-limitation as in typhoid fever, which ends when the disease has finished its career—and the frequent presence of typhoid symptoms also, ally it to the fevers (Flint). There is no tendency to relapse when the disease is ended, and it does not persist in a chronic form, points in which it also resembles the essential fevers (Flint). Our author holds that "these characteristic clinical facts are undoubtedly due to the fever, irrespective of the pulmonary affection."

Moreover, the constitutional character of its genesis, as

just shown by Flint, and as emphatically claimed by Jurgensen; the comparative rarity of discoverable causes for its production (W. Fox); our inability to produce the disease experimentally (Flint, Jurgensen); the cyclical course of the process, including the sudden febrile rise, and the character and extent of defervescence; absence of uniform relations between the extent of the local lesion and the general symptoms, the self-limitation of the pyrexia and its termination by crisis—these facts it is claimed further, or also, ally acute pneumonia with the essential fevers.

Thus I have endeavored to give a statement of the entire ground upon which the pyrexial hypothesis rests, and summing up the points presented we find the basis for affirming acute lobar pneumonia to be essentially a fever as follows: It is shown that the pneumonic phenomena can not be the result of an inflammatory state, or of a simple inflammation of the lungs; that, therefore, it must be a constitutional disease, and hence essentially a fever (Flint, Jurgensen). Because it occurs most at certain seasons of the year, and is more prevalent in some climates, it is held to be specific (Flint). Its febrile character is further claimed to be established by the phenomena of its course (Flint, Jurgensen), and it is thought not improbable that occasional prodromal symptoms strengthen this claim.

That this malady is not an inflammatory disease I have already been at some length to show; that it is of constitutional origin or genesis, which view is generally held, or is fast gaining ground, and is indicated by all the knowledge we have of its causation in general, I believe, although, as I shall point out, strictly local conditions may cause its initiation; but that it is a fever because it is not an inflammatory disease, and because it is of constitutional origin, and, furthermore, that such fever is specific because in many of its phenomena and in its course it somewhat resembles the essential fevers, I hold is not yet proved. It will be observed that the deduction that it is a fever, essentially, so far has been made on the ground of exclusion—to wit, that, if a constitutional condition be essential, that condition is a fever (Flint); which can not be accepted as scientific or final unless it shall or can be shown that upon this basis, and on no other possible hypothesis, can all the phenomena of the disease be explained.

And the further facts that it is an intercurrent affection in the course of the essential fevers, that the disease prevails most at certain seasons in the year—in the winter and spring months—that it is more prevalent in some climates than others, and that it varies greatly in different seasons in its fatality, do not strengthen the foregoing deduction; because these results may also be accounted for on other grounds.

Furthermore, the same criticism may be applied to the facts of its clinical history, which, though it comprises a pronounced chill, sudden temperature rise—often out of proportion to the local affection—termination by crisis, a marked defervescence and a cyclical course, and while these phenomena may liken it to the essential fevers, yet they do this only in a general way. In no particular, as we shall see, is the likeness special, and the phenomena may otherwise be accounted for.

But there are other points against the febrile hypothesis which may be advanced: First. "Although this disease is not infrequently an intercurrent affection in the course of the essential fevers, yet, as it is only an occasional complication, the determining cause involves something which does not pertain to these fevers" (Flint). Something, a special or specific cause, is here rendered necessary, and this, we are told, "it is reasonable to conclude is pneumonic fever." This specific cause, however, "the essential causation," it is conceded, "is not demonstrable" (Flint); which, with the further fact that many hold a single blood-poison inadequate to account for the development of the disease under all circumstances, as it appears in every country and latitude of the globe, in individuals of every age and condition of life, and, I may add, as it is developed in animals—notably in the horse—renders the existence of a special cause more than doubtful.

Second. While in some respects the pathology of acute lobar pneumonia resembles that of the essential fevers, especially in being comprised of characteristic constitutional phenomena and an equally pronounced characteristic local lesion, also in being self-limited, in manifesting a cyclical course, and in the absence of a close general relation between the degree of the constitutional symptoms and the extent of the local lesion, yet these points of similarity are general, and not sufficiently special to warrant their being used as a basis of deduction. On the other hand, in the matter of ætiology, of exact comparison of symptoms and course of morbid anatomy, and of dangers and treatment, it is most unlike those diseases. Ætiologically, it does not occur at the same seasons of the year that typhoid fever—to which it has been compared as allied—prevails; nor is it limited with it in the area of its development; it is not propagated by contagion, while typhoid is; and it does not occur—the form we are studying—in epidemics. As stated, pneumonia is most common in the winter and spring months, while typhoid is most common in the autumn, or may occur throughout the year. Pneumonia of the acute lobar form is eminently sporadic, and does not propagate itself. Furthermore, while the fevers mentioned are somewhat protective against a second attack, pneumonia, on the contrary, rather predisposes to a second attack than otherwise.

In symptoms and course the diseases are unlike. It is hardly necessary to do more than to allude to the sharp chill and rapid development of the one—pneumonia, and the prolonged, uncertain chill and gradual, daily progressing development of the other—typhoid; of the termination by crisis of the former, and the extended resolution of the latter. The symptoms and causes also of typhus and the disease we are considering are equally dissimilar. Pathologically: The local process in pneumonia has more than once been likened to the intestinal lesion of the solitary and agminated glands in typhoid fever. Just how the anatomical changes which occur in the lung in pneumonia coincide with the lesion of typhoid I am unable to determine. They are not similar in any particular; on the contrary, they are most dissimilar in their development, course, and results. The development of the pneumonic process is most rapid, the time required for its completion in some cases being only

a few hours; while the intestinal lesion of typhoid forms slowly and requires days for its completion. The course of the former is singularly rapid, its completion and removal being quickly accomplished without causing injury to the structure implicated; while that of the latter is slow, and generally destructive of the organs involved. Again, the results of the two processes are unlike histologically; the exudation of pneumonia being made up of preformed elements—namely, of an increase of bronchial mucus, the liquor sanguinis, white or colored blood-corpuscles, red blood-corpuscles, and some increase of detached epithelium; while the exudation in the intestinal glands is a new formation, consisting of a proliferation of nuclei and a low grade of epithelial elements, which, with the softened gland structure, make up the so-called medullary infiltrate. The two processes further differ in color, the pneumonic being at first a bluish-red, afterward yellowish-gray, while the typhoid lesion from the first, or very early, presents the shaven beard, pinkish-gray appearance. Further, in regard to the clinical unlikeness, except that in some cases the asthenia of pneumonia resembles the debility of typhoid, the symptoms are most dissimilar. The thermal curves of the two maladies, considered as essential fevers, which should exhibit any inherent likeness, are most unlike; that of pneumonia being acute both in its ascent and decline, while the curve of typhoid is, in the main, gradual and most regular in its ascent (this being interrupted only by regular daily remissions and exacerbations), and most irregular and uncertain in its decline. The indications for the treatment of the two diseases, as we shall find, are not less diverse; while in the main those of the typhoid disease are mildly antiphlogistic, sedative, alterative, and for support, in pneumonia at first they are eminently expectant and symptomatic, as derived from the constantly changing physical or physiological conditions; afterward, they are wholly tonic. As we shall find, no alterative indication, which is the sheet-anchor of treatment in typhoid, is met with in pneumonia. Further, I would only remark that the difference exhibited by the morbid anatomy alone should justify a distinct classification for the two diseases.

On account of its cyclical course, Juergensen likens croupous pneumonia to the intermittents, the acute exanthemata, acute rheumatism, and epidemic cerebro-spinal meningitis. It is unlike the intermittents in not being endemic, although certain localities in the Southern States (Flint) and high altitudes with a low barometer, for the unacclimated, in some cases predispose to an attack. For the intermittents there is a well-recognized cause which we call malaria, for which we account by more remote but well-understood causes. The aetiology, history, and habitats of malaria are well known, and, therefore, may be avoided; there is no specific cause known for acute pneumonia. The poison for the intermittents is spatial, and all the dwellers within certain limits are liable, sooner or later, to suffer from its influence. This poison also manifests certain well-known types of action, producing, according to its virulence or concentration, congestive, remittent, intermittent fever or dumb ague, besides other well-recognized functional derangements, neuralgias, etc., and it possesses all the charac-

ters of an infection, inasmuch as it dwells in the system for weeks, months, or even years after its reception. Acute pneumonia is not endemic; there is only one type of the malady, and the cause of the disease does not remain in the system after an attack.

In no aetiological sense does the disease resemble the exanthemata, which have each a period of incubation; each propagates its like and is protective of future attacks, and each has sequelæ, in all of which characteristics they differ from pneumonia.

Its unlikeness to epidemic cerebro-spinal meningitis consists in its not being epidemic, in not occurring at the same season, in not being endemic, and in its not confining its attacks to individuals of certain ages.

It is claimed that it is like acute articular rheumatism and is, therefore, an infectious disease due to the action of a morbid agent (Flint, Juergensen, Draper). It is unlike that affection clinically in manifesting a strictly typical course which is cyclical and self-limited, and which terminates by crisis; acute rheumatism, on the other hand, runs an indefinite course, and does not terminate by crisis. The morbid anatomy of the two diseases is unlike. In rheumatism local lesions are not confined to one organ but are changeable; while in pneumonia one organ, the pulmonary, is always affected. We have very clear ideas of the aetiological conditions which cause acute articular rheumatism, and from certain data can predict the disease, while as yet there are no well-recognized signs by which a pneumonic attack can be anticipated. The rheumatic disease, once established, is probably never wholly eradicated, though it may become quiescent. Under certain conditions it will manifest itself, in greater or less effect, throughout life, and is probably hereditary; while pneumonia is most likely due to accidental causes, if not wholly so. Its process once set up, it runs a rapid course, leaves no diathesis, and is not hereditary. The indications for treatment of acute articular rheumatism are well known, clear, and simple, while as yet the therapeutics of pneumonia is obscure considered from a rational standpoint.

Thus, upon no ground of close similarity am I able to understand why acute lobar pneumonia should be classed with the essential infectious fevers.

As the pathology of acute lobar pneumonia embraces, on the one hand, a well-marked constitutional state, among the phenomena of which is notably a clearly defined, characteristic febrile manifestation, and, upon the other, an equally characteristic, well-defined local process, pathologists have sought to determine its nature or true character by seeking to establish which of the two divisions, the constitutional or local, is primary—first in order of development, and therefore essential. Dr. Parkes, *loc. cit.*, discussed this point in 1860, but without reaching a conclusion; although he inclined to give precedence to the fever, for he says that “the assumption that the fever ends because the local disease has terminated is extremely hazardous,” thus disclaiming a causal influence for the latter. Dr. William H. Draper, in a paper already referred to, “in 1866” (Flint), also discussed the question of priority, and concluded, with Dr. Parkes, that “the pyrexia antedates the local process pos-

sibly by some hours," and, therefore, that the disease is essentially a fever. But, he says, although it can not be answered definitely in regard to this precedence, yet that presumptive proof would give it to the pyrexia. My own observations of the phenomena of the disease lead me to the opposite conclusion. Although there are cases in which fever has been present some hours, possibly for a day, or longer even, and we are unable to account for it definitely by existing physical signs, yet, even then, we can not say that a local change sufficient to cause the constitutional reaction manifested, although of limited extent and so deeply seated as not to be readily appreciated, has not taken place. Generally, however, in these cases where the existing temperature rise can not be otherwise accounted for, and there is present also pain or discomfort in the chest, some dyspnoea on exertion, a state of nervous anxiety, possibly some hacking cough, a careful exploration of the chest will reveal a local diminished intensity of the respiratory murmur, some scattered moist râles, subcrepitant in size, an increase of vocal resonance, and generally a bronchial character to expiration, showing that a local lesion already exists. Though the clearly appreciable physical signs are sometimes delayed, yet from the foregoing considerations one can not say that there has not existed, from the first moment of the attack, a lesion, though slight, yet of sufficient extent to cause, in the particular case, the irritative or reactive pyrexial expression present. That such sufficient lesion has existed is rendered probable by the following considerations: In no given case can we say how extensive a lesion is required to set up or cause a certain grade of febrile reaction. For, as is stated by Juergensen and observed by many others, there is no exact relation between the local lesion and the general symptoms: "A large consolidation is often formed with slight fever, and, on the contrary, a slight lesion may be attended with high fever." Which lack of relation expressed is the rule.

Again—and this consideration would of itself appear to settle the point conclusively—Juergensen says, "The extension of the local affection to parts of the lung hitherto unaffected is often accompanied by an increase of fever." In my experience, this not only often is the case, but it is the rule. And that such extension of the local process should be attended by an increased temperature rise is to my mind such evidence of cause and sequence in the relation—cause local extension, sequence fever—as would justify the deduction that in all cases the natural order of events gives precedence to the local lesion. Furthermore, the rapid development of the local lesion, we may say synchronously almost with fever, and in some cases with no or very slight fever, argues against its being a result.

As already stated, it is a part of the theory of the pyrexial hypothesis that the local lesion of this malady is a conservative process by which a morbid material, the active, febrile-making cause, is eliminated from the system. This belief is sustained by the facts that the fever and process of exudation are concurrent, and that defervescence occurs when consolidation is complete—the rationale being that with the maximum of consolidation, or its completion, the poison has been eliminated, and therefore the fever termi-

nates naturally. That the lung may be or *is* the organ affected by the special poison in this malady, and therefore its avenue of exit or elimination, is held probable by the fact that they are developmentally allied to the glandular organs, through which eliminative effects generally occur. It is claimed that this view is further strengthened by the occurrence of profuse sweating and of herpes in pneumonia, which conditions are commonly associated with disordered blood states.

Profuse sweating and herpes are also often the result of deranged functional disturbances and of febrile states which follow an ordinary cold, and are not more necessarily due to a blood-poison than thermal derangements and nervous conditions. Their occurrence in this malady is probably the result of an elevated temperature, combined with the singularly deranged circulatory and respiratory conditions which result. This opinion is justified by the fact that herpes, especially, occurs in cases where the temperature has been highest.

The question now arises, Does the lung, or, more exactly, that portion of it which is involved in a single case of acute pneumonia, perform the office of a special emunctory in this malady? Beyond the following facts—namely, that the lungs are embryologically allied to the glandular organs, that they are the seat of the local manifestation of this disease, and that pneumonia, as a whole, comprises two separate and well-marked sets of phenomena, rendering the disease in this respect similar to the infectious diseases—there is no ground for maintaining that the involved organ performs such emulgent function; on the contrary, there is much to render the fact of such an office most improbable.

Against such action it may be stated, at the beginning, that the existence of a poison to be eliminated is entirely a matter of speculation; the affirmation of which is greatly weakened by the acknowledgment that it is both unknown and has not been traced by chemistry or otherwise. In the more complete determination of this point, however, there are several questions relative to the possibility of this local process being eliminative in character, answers to which must conclusively negative the ground of such action: First. If such an office is performed by the lung, why should this extraordinary function fall upon a single lung, or upon a fraction of an organ, instead of upon both lungs? And why should the lower lobes and the lower lobe of the right lung be its favorite seat?

One of the characteristics of the action of a blood-poison in the system, and especially of the local action it sets up, is its diffuseness. In this malady we have not a diffuse action throughout the lungs, but a strictly local process. This argues against depurative action; besides, it is more reasonable to suppose that, if a poison were being eliminated by the lungs in this process, both lungs, and many foci in both, would be the seat of its local manifestations. The pneumonic process being particularly local, and its extension from one region being the rule, not only argue against a general cause present in the blood, but make the existence of such cause extremely problematical. We shall see, later on, that this localization of the pneumonic process, and the tendency of its attack, of its site, to be somewhat special as

regards the right lower lobes, point to a cause more selective or special in its action than general blood-poisoning.

Second. Why should it be necessary for the lung structure to become consolidated, and, therefore, functionally inhibited, in order to perform this depurative act? Why should that be done in this case which we should naturally suppose, *a priori*, would directly defeat the purpose in view? One would naturally suppose that, for the performance of an increased or extraordinary function, the lungs should take on increased action, instead of which, in this process, an opposite course is pursued. On account of the consolidation of the involved area, and the further, consequent collateral results outside of consolidation from congestion, œdema, and pressure direct and lateral, these organs are rendered quite helpless; are so restrained, inhibited, that they hardly maintain, especially in the early stage of the disease, a necessary function for the required hæmotosis of the blood. In fact, the great danger at this time is from carbonic-acid poisoning. Hence it is unreasonable to maintain that during this time they are doing more when they are in reality doing less than normal; and it is equally natural to conclude that a morbid material has not been eliminated and a diseased state terminated by this method, when consolidation has been completed and defervescence sets in.

But we are told that the poison is eliminated in the exudate. If so, to what purpose? It is still in the system, and as far as it can be traced remains there. If in the exudate, it is shut up and can not escape. It does not come in contact with the air, and hence can not escape by that medium. It is not expectorated. If its natural way of escape is through the sputa, as in some cases this is absent or occurs only in small amounts, and as in the majority of cases the exudate which escapes *per sputum* is much less than that which is reabsorbed, this operation must as a rule be a failure, and most of the poison is returned to the system. Therefore, we may say practically, it is not expectorated. If the poison is returned to the system, of what purpose, we say, has been the process? As Nature does not defeat herself, we prefer to think there has been no emulgent action attempted in the process, and that the purpose of the local affection is not eliminative.

(To be concluded.)

TRICHINIASIS

IN ITS RELATION TO

PUBLIC HEALTH AND NATIONAL ECONOMY.

By FRANK S. BILLINGS, VET. SURG.,

BOSTON.

Fourth Article.

It is not my purpose to write an essay on the pathology of trichiniasis, either in man or in animals, or to compile statistics of the occurrence of the disease in either species, but to touch upon the salient points in the natural history of the parasite, illustrated by such cases and statistics as may seem necessary. Treatment does not belong to an essay bearing upon this disease from the sanitary standpoint. Glazier's "Report," published by the United States Marine-

Hospital Service in 1881, is the most complete of anything in existence, to which I refer readers desiring to look up the subject *in extenso*.

It has been already mentioned that the discovery of the ætiological connection between trichiniasis of the hog and of man was first made by Dr. Zenker, of Dresden, in 1860, in the case of a servant girl that was admitted to the City Hospital at Dresden as a *typhus patient*. She died! her muscles were found completely infected with the parasite. At the same time she was taken sick, others of the same family, and the butcher who slaughtered a hog for them, were ill also, but their sickness presented a modified form in comparison to that of the girl. An examination of the pork eaten from, and remaining, revealed the presence of numerous trichinæ.

Thudichum* sums up the principal phenomena of trichiniasis in man as follows: "Sudden swelling of the face, particularly of the eyelids, after the patient has for some days felt prostrate and lost appetite; the swelling causes a sense of tension, but no pain; fever, quick pulse, copious perspirations, which not rarely have a repugnant odor; painfulness and immobility of the arms and legs, which give great pain on being moved or pressed severely; in the worst cases, the entire body is perfectly immovable and highly sensitive; there is diarrhœa; a red, somewhat coated tongue, inclined to dryness; when the swelling of the face has subsided, œdema of the feet, legs, and thighs comes on. Shortly afterward anasarca and swellings over the trunk make their appearance."

From the time of Zenker's case numerous others have come to light in different countries.

Epidemics have been reported at different places in Germany, the most remarkable of which was that at Hedersleben, a little place of 2,000 inhabitants, of whom 337 became sick at one time, and of this number 101 died.

The discovery of trichinæ in human beings at the excision of tumors has been previously mentioned.

Forty persons were sick with trichiniasis at one time at Bremen, from, it is said, eating American pork.

At Lissa five members of one family became infected from eating a ham which had been pickled, smoked, and then boiled for two hours.

A poor woman derived the disease from eating the flesh of a dog, to which her necessities had driven her.

Dr. Kiefer (Detroit) reports a fatal case of trichiniasis.

Dr. Herr (Dubuque, Iowa) reports 15 cases with 5 deaths.

Several cases are reported in the "American Journal of the Medical Sciences," Philadelphia, Pa.

In January, 1881, a case occurred at Blackwell's Island, N. Y.

Two cases were reported at Chicago the same month, and two at Milwaukee.

Dr. Germcr, Erie, Pa., reports (private letter, January 27, 1881) that the preceding Christmas he discovered seven cases, in a place eight miles distant, which were traced to the eating of home-fed and cured pork.

* "Seventh Annual Report of the Privy Council," London, 1865.

The most interesting American case is one which occurred at Brooklyn, N. Y., in September, 1879. Seven of a family became ill with trichiniasis, two of whom died. A lawsuit was the result, the family suing a packing-house from which they had purchased a part of a ham some days previous to the eruption of the disease. As they had been continually in the habit of eating raw ham and sausages, and as they had purchased the ham only two days previous to the first appearance of pathic phenomena, it was self-evident that the plaintiff did not have any ease, especially as no microscopic examination of the ham had taken place. Further, it is not possible to look upon retailers of pork as responsible for its being free from trichinæ in a country where neither the law nor the community recognizes any such disease of pork. Even our boards of health simply recognize the existence of trichinæ in pork as a scientific fact. All of the hogs, trichinous or not, which I examined portions of, were cut up, packed, and sold, although the Massachusetts Board of Health was perfectly well aware of the results of my daily examinations.

Until the consuming public becomes alive to its own interests, we may be positively sure that no steps toward prevention will be taken by any local or State authorities.

A German judge has ruled differently, declaring a provision dealer "guilty" who had sold trichinous pork, although the same had been subjected to microscopic examination; the pork had been eaten by several persons, causing sickness and, in one case, death.

Dr. Sutton,* Aurora, Ind., reports nine cases of trichiniasis, with three deaths, the persons having eaten smoked sausages; examination of the remainder of the sausages revealed the presence of trichinæ. A cubic inch of flesh taken from the body of the person that died was estimated to contain one hundred thousand trichinæ.

Dr. Sutton says that "the microscopic examination of thousands of swine slaughtered in Indiana revealed 3-16 per cent. of them to be infected with trichinæ. This is an unfounded statement, there being at the time no record of the examination, either of "thousands" or of a single thousand hogs.

The "Rochester Democrat" of May 1, 1879, reports several cases of trichiniasis in that vicinity. Others may be found in the State Board of Health reports from Michigan.

Many of the cases mentioned in the daily papers as trichiniasis may be as reliable as the remainder of their information on kindred subjects.

A very interesting case of trichiniasis, among a large number of people at a village on the Jordan, is mentioned by Dr. Wortabet.† It was due to the consumption of the head and portions of a wild hog.

Trichinæ have been very frequently found at the dissecting-table in the flesh of man.

PREVENTION OF HUMAN TRICHINIASIS: 1. Exact microscopic examination of pork before the animal is allowed to be cut up for packing or retailing in any way.

Cook thoroughly until the piece of pork is really done all through.

Book Notices.

Farmacopea Nazionale e Generale, Materia Medica, e Terapia del Prof. Dr. C. RUATA, già Assistente di Materia Medica presso la R. Università di Padova. Contiene oltre ai preparati proprii, tutti i preparati farmaceutici delle Farmacopee degli Stati Sardi, dell' Orosi, del Campana; della Farmacopea Austriaca, Belga, Danese, Francese, Germanica, Inglese, Russa, e degli Stati Uniti d'America; l'azione dei farmaci e le indicazioni terapeutiche; i pesi e misure dei differenti Stati; suggerimenti pratici sul modo di ricettare. Verona e Padova: Drucker & Tedeschi, 1883. Pp. vii-970.

PERHAPS the best idea of the character and scope of Dr. Ruata's book can be gathered from a comparison between it and certain others which it most nearly resembles, namely, our own dispensatories. Taking, for instance, the last edition of the "United States Dispensatory," by Wood and his co-laborers, as a standard of comparison, we observe that both consist of elaborate treatises on pharmacology and therapeutics which are professedly commentaries on official pharmacopœias, and that both follow their model in adhering to an alphabetical order of treatment, an arrangement which has the obvious advantages of promoting ease of reference and of not holding the author to any system of therapeutical classification. In our dispensatories this order is rigidly adhered to in all its details, while in Ruata's book only the drugs themselves are arranged alphabetically under their Latin titles, the preparations, on the other hand, not appearing in the body of the book, but as subordinate items under the heading of the drug to which they belong. For a book which possesses a complete alphabetical index, this method, it seems to us, possesses advantages for purposes of study, and certainly for purposes of reference, inasmuch as the reader who is searching for a preparation may not have its exact title in mind, and again he frequently wishes to compare it with the other preparations of the same drug; in each case his natural impulse is to look under the title of the drug, and not that of the preparation.

In the matter of synonyms the Italian book is deficient in not giving the foreign equivalents of the preparations, although very full lists of the synonyms of the primary drugs are given. In the department of botany, too, the Italian work is meager, and is certainly far behind its American rivals.

In the pharmaceutical division, while less full than Wood's Dispensatory, Dr. Ruata's book is complete enough for practical purposes, and, moreover, has the great advantage over the American work of containing a very satisfactory account of preparations of which we hear little in this country—preparations, namely, of the different Italian, Russian, Belgian, Austrian, and Danish formularies. In fact, this feature of the book will constitute its principal value in the minds of those of our scientific pharmacists and physicians who do much reading in current medical literature, and are often at a loss how to estimate properly the strength and composition of the preparations they see mentioned.

The most distinctive portion of Dr. Ruata's book, and one in which it greatly surpasses our dispensatory, in point of completeness at least, is the full and detailed account which it contains of the physiological action and therapeutical uses of the principal drugs. Opium, for instance, claims four large pages of fine print for a description of the physiological effects of the gum and its alkaloids and their antagonism by other therapeutic agents; while four more pages are required to describe the therapeutics and toxicology of the drug.

As regards accuracy, there is little to choose between the

* "Lancet," 1875, vol. ii.

† Virchow's "Archiv," vol. lxxiii, p. 553.

American and the Italian publication, both being as close approximations to the absolute as one could reasonably expect. In mechanical execution and general make-up the American books are perhaps the superior, as they certainly are in size and in the abundance and diversity of matter which they contain.

The chief points of difference between them, it will be seen, lie in their aims, the dispensatories being addressed rather to the pharmacist, the *farmacopea* to the therapeutist; and in their special lines all of them, it need scarcely be said, will be found to be of very great value as books of reference.

Medical Economy during the Middle Ages: A Contribution to the History of European Morals, from the Time of the Roman Empire to the Close of the Fourteenth Century. By GEORGE F. FORT, author of the "Early History and Antiquities of Freemasonry." New York: J. W. Bonton, 1883. Pp. xii-488.

THIS work is one that is well worthy of a careful perusal, though not requiring close reading. After giving a skillfully drawn outline of the state of medical practice in the times of Cato, the censor, at Rome, its uses and abuses, the restrictions placed upon it, and the privileges accorded to it from that time onward, the author proceeds to give an account of the advance of scientific methods of practice by the geniuses who first drew medical science from empiricism to principle, its practice being divided into various branches, and each studied and explained, as far as could be done at that time, by the thinkers and observers Agathinus, Aretæus, Celsus, Galen, and others. He then treats of medical schools, in Alexandria especially, as thence extending to all the parts of the Roman Empire; the Arabic influence on this, to them new, science; German, Gallic, and Spanish cultivation of medical art; the effect of Pagan and Christian ideas upon its practice; the belief in magical, mystical, and demoniacal agencies; the decline and rise of the art in different times and under various influences; the status of medical men in the Middle Ages; and the intelligent aid extended by different great men at critical periods.

We have endeavored to show by this brief summary that the work is not one meant only for professional or scientific readers, but eminently one for the intelligent of all classes. Its style is easy and clear, and it is pleasant to read a work involving so much research and, at the same time, so methodical in arrangement. Nor does the author fail to give due honor to all of any nationality who, in their respective ages, assisted to make clearer, purer, and stronger the light from the lamp of intelligence. All—Arab, Italian, Spaniard, Frenchman—are honored in due proportion. The most entertaining part of the work, in our opinion, is the brief yet lucid account of each locality as affected by its surroundings and previous culture.

Is Consumption Contagious, and can it be transmitted by means of Food? By HERBERT C. CLAPP, A. M., M. D., Professor of the History and Methodology of Medicine, etc., in the Boston University School of Medicine, etc. Second edition. Boston: Otis Clapp & Son, 1882. Pp. 187. [Price, 75c.]

THIS work seeks to establish upon a clinical basis the contagious character of all varieties of phthisis. Under consumption the author includes every form of phthisis, and under the term contagious he expresses indifferently either infection or contagion. With the many thousand annually dying of phthisis, we should suppose that a work which sought to establish such a hypothesis (as we will for the present term it) should rest for its argument upon many hundreds if not thousands of carefully noted cases. It is somewhat surprising to find that the

main deductions of the book are drawn not from an unbiased review of many hundred cases, which the author had at his disposal, but from twenty-five, carefully selected from among the former number, which seemed most favorable to his theory. He evidently starts with a theory, and then looks for premises to base it upon, the reverse of our usual methods of scientific procedure.

With pleasing candor he reviews historically the opinions of the ancient and older and recent writers upon the subject of the transmissibility of phthisis. Here we find side by side arguments as strong against as those favoring the theory of contagion. In a succeeding chapter the author speaks of cases of contagion of tuberculosis among cattle, as shown by their contracting the disease under good hygienic surroundings in well-ventilated stables, when placed in stalls previously occupied by diseased cattle.

After a recital of the twenty-five cases already alluded to, the author rapidly makes his deductions: First, strongly favoring contagion; secondly, that the period of incubation must be weeks, months, and even years; and, lastly, that all ages are susceptible.

Interspersed with these deductions we are met by such arguments as these: Hereditary transmission will not account for all the cases; "the majority must therefore have been acquired, and how?" to which the author replies, As likely by contagion as by any other means. He then answers the objections to his deductions. He states that simply because the causal relation between the contagion and the subsequent disease can not always be traced, and because a comparatively small number may be attacked in this way, is no argument against the theory. He cites the varying susceptibility to the other well-recognized contagious diseases. To quote the author's words: "For this reason, even if the number of recognized cases of consumption produced by contagion is quite small, we need not on that account abandon the doctrine, but admit that it may be contagious to a slight extent and under certain conditions." Next, the author dwells upon the probability of infection from tuberculous food, such as the meat or milk of diseased cattle, arguing from experiments upon the lower animals and suggesting that food may transmit the disease. The inoculability of tuberculous matter and the experiments of Cohnheim and others are referred to. Finally, in an Appendix, we have an allusion to Koch's more recent discoveries of the tubercle bacillus. As the publication of these discoveries succeeded the time of the writing of the book, the author has been unable to make use of it in the body of his work. We regret it all the more, as it would have furnished him with the most important argument in favor of the theory of contagion.

In the light of a journal article or an essay before a medical society, seeking to call attention anew to the contagiousness of phthisis, the author's work would have appeared justifiable and highly creditable; as a book for the public, we must say that his deductions are not proved, though our opinion leans toward the one the author seeks to establish.

BOOKS AND PAMPHLETS RECEIVED.

The Mineral Springs of the United States and Canada, with Analyses and Notes on the Prominent Spas of Europe, and a List of Seaside Resorts. By George E. Walton, M. D., Member of the Société Française d'Hygiène, Paris; ex-President of the Academy of Medicine, Cincinnati, etc. Third edition, Revised and much Enlarged. New York: D. Appleton & Co., 1883. Pp. xvi-468.

The Essentials of Pathology. By D. Tod Gilliam, M. D., Professor of Physiology, Starling Medical College, etc. Philadelphia: P. Blakiston, Son & Co., 1883. Pp. 296. [Price, \$2.]

THE
NEW YORK MEDICAL JOURNAL,
A Weekly Review of Medicine.

Published by
D. APPLETON & Co.

Edited by
FRANK P. POSTER, M. D.

NEW YORK, SATURDAY, SEPT. 1, 1883.

BATTEY'S OPERATION.

NONSENSICAL as the term "normal ovariectomy" was, it was generally understood that its author, Dr. Robert Battey, intended it to signify the operation of removing the healthy ovary—in plain English, spaying. At the same time it was evident that in a number of Dr. Battey's earlier cases the ovary was not healthy. By common consent, the ridiculous expression we have mentioned was soon given up, and the procedure in question came to be known as Battey's operation, or "oöphorectomy." The strict meaning of the latter word affords no justification for limiting it to any particular form of the operation of removing the ovary, for it is quite as applicable to the removal of an immense cystic ovary as to excision of the normal organ. Nevertheless, it may come to be regarded as practically the best term for all operations that consist essentially in extirpation of the ovary for other reasons than the existence of ovarian tumors, restricting the mongrel word ovariectomy to the removal of such tumors, since it has for many years been used so generally in this sense as to have become fixed in our literature.

Although there was originally no other justification for the term Hegar's operation than a laudable disposition to give its promoter the credit of having arrived independently at the conclusion that certain good results were to be reached by removing healthy ovaries, yet the term has been so carefully restricted to the operation done with the definite purpose of withdrawing the physiological ovarian stimulus from the uterus, and so putting a stop to the growth of tumors of that organ, that it is likely to hold its place in nomenclature, whatever our ideas may be as to the precise credit for originality that should be awarded to Battey and Hegar respectively. So, too, what has lately come into vogue under the title of Tait's operation—meaning the removal of what that surgeon terms the uterine appendages, particularly the Fallopian tubes—seems to have a distinctive purpose quite apart from the abolition of ovarian function, and therefore can not properly be classed as a variety of Battey's operation.

Strictly speaking, there appears to be nothing left to which the latter term can be explicitly applied, except oöphorectomy for the relief of ovarian neuralgia, including ovarian dysmenorrhœa, and certain derangements of the general health reasonably referable to such diseased states of the ovary as are not of much importance from a surgical point of view. In Dr. Battey's latest publication on the subject, in the August number of the "Virginia Medical Monthly," brief notes are given of eight cases of "Battey's operation." It is noteworthy that the ovaries are not expressly stated to have been found healthy in a single one

of the eight, although it seems probable that such was the case in one of them. In one or two of them, indeed, the organs were found profoundly altered, with implication of the oviducts, generally in the form of cystic degeneration or cyst-like dilatation. It is evident that in such cases the real ground for removing the organ is not to do away with its function, and yet it is to be inferred that Dr. Battey regards the artificial induction of the menopause as of prime importance, for he plainly states his disinclination to stop short of the removal of both ovaries, even if only one of them is found diseased—a feeling that is the result of his experience.

On the other hand, it is remarkable that so much stress is laid on the slow progress of the improvement that is to be looked for after the operation. In one instance it is noted, twelve months after the removal of the ovaries, that the patient was much improved in every way, but not entirely well yet—the diagnosis having been recorded as "chronic uterine disease for ten years, with oöphoralgia which has resisted all treatment," and both ovaries having been found diseased; and the statement is made, "She will continue to improve for a year or two more." Surely, the function of an organ must cease at once on its removal, and it is difficult to see how a result that takes two or three years for its accomplishment can properly be set down to the discontinuance of a function that was stopped in an instant. It is curious to contrast the case referred to with another, in which, three months after the operation, the patient was "much improved," but, when she was last heard from, "the time was too short to indicate final results."

From all these considerations we are led to infer that Dr. Battey regards his operation as including all oöphorectomies except those to which the term ovariectomy is commonly applied. If this is the case, he can scarcely admit the propriety of classing Hegar's operation by itself, or Tait's, either, since it is his practice also to remove the Fallopian tubes whenever he finds them diseased, and with quite the same objects in view as those aimed at by Tait. The profession must either accept this view, or limit the originator of the operation to a residual field, definable only by comparison—a restriction not easy to reconcile with the broad scope at first laid down for oöphorectomy by Dr. Battey.

CHARITY HOSPITAL.

WITH all the attractiveness of its situation, and its fair architectural appearance, there was a time, and that not long ago, when the sick poor looked upon Charity Hospital with loathing, when to be sent "to the island" seemed to them a disgrace little short of that attaching to incarceration, and when medical men regarded the institution as of no particular educational importance, but rather as a revolting sort of curiosity shop, where nothing was exemplified but the ravages of misery and vice—a concentration of what they already saw enough of in their daily rounds.

Both classes were amply justified. The patients had come to feel that the island was a lumber-room to which nothing in the shape of disease was sent, unless of an infectious nature or else so utterly devoid of interest as to be thought fit only for a

style of medical treatment that amounted to no treatment at all; where, semi-starvation and a hollow mockery of nursing would but co-operate with disease; and from which they would return, if indeed they came away alive, with a shadow of a hideous episode clinging to them for the remainder of their lives. Physicians—those who had had any connection with the place perhaps even more than the profession in general—realized that the unfortunates who were there ostensibly as patients, but really as paupers, were, almost without exception, so broken down that any attempt to patch them up was well-nigh hopeless, even with all the appliances known to art, and, in addition, that but the barest specter of such appliances was at their command. It was like cleaning the Augean stables to effect even the most ordinary modification of the wretched dietary in individual cases of sickness; alcoholic stimulants ordered for the sick were stolen by the nurses and orderlies; the drugs furnished were few in number and poor in quality; and the supply of surgical instruments would not have stood comparison with the display in many a pawnbroker's window.

It is a relief to turn away from this picture and look at the Charity Hospital of the present day. The wards are neat and attractive; an excellent training-school for nurses has supplanted the burlesque service of the past; the good and wholesome food provided by the city is no longer prevented from reaching the sick, while well-directed efforts in cookery have done away with the repulsiveness of what was formerly allowed to go to the wards; there is a reasonable certainty that a milk-punch ordered for a sick man will find its way to his stomach; the pharmacy is in competent hands, with a fair supply-list; all ordinary surgical appliances are either at hand or to be had without undue delay. In short, the hospital work is done with the real object in view of guiding disease to a favorable issue, and sending the sufferer back to a life of usefulness, in place of the slipshod policy that in years gone by so often buried him in the potter's field or, worse yet, wound the web of confirmed pauperism about him. Appointments on the medical staff, that once almost went begging, are now eagerly sought after by men perfectly competent to carry on the service with credit.

This improvement has been gradual, but especially marked during the last five years. Not the least efficient element in bringing it about has been the recent emancipation of the medical service from the drawbacks incident to former encroachments by administrative officials. It is much to the credit of the members of the staff that they have helped themselves out of this slough. It is true, they have been loyally seconded by the Commissioners of Public Charities and Correction, but the first move—the step that costs—was to show themselves in earnest and deserving of the commissioners' trust.

Unless we are greatly mistaken, Charity Hospital is destined to take a position still higher. The tendency of educational institutions toward the upper part of the town will go far to make it a prominent field for clinical teaching, and this in turn will render it still more attractive to the class of medical men from which its staff can best be recruited, as well as to young men seeking house-staff appointments.

THE DECAY OF HOSPITAL TEACHING.

It is to be feared that the modern amplification of the technical element in medical practice has not been altogether free from a certain pernicious effect, notwithstanding its great advantages on the whole. That it has rescued a great proportion of chronic invalids from the limbo for incurables there can be no doubt, or that *ipso facto* it has exalted medicine in the eyes of the world. We may concede, too, that, as a direct result of its action in this direction, it has heightened the devotion of physicians to their art, and drawn into the profession a great number of able men who, but for some such elevation of medicine, would have chosen other callings. In the main, therefore, it is beyond question that the ascendant reached of late years by the manipulative phase of therapeutics has been beneficial. It seems open to doubt, however, whether our system of teaching tactics in the presence of acute disease has not been clogged as the result. It is but a few years ago that chronic diseases of almost all sorts were reckoned among the *opprobria medicorum*; now they are hunted down with so much ardor, and with such a multifarious enginery, that there really seems to be some danger of such commonplace affairs as fevers and phlegmasias, to say nothing of the diatheses, playing the part of the tortoise to our hare.

Why do men feel doubt as to the real nature of the present visitation of pestilence in Egypt? Why does it remain for weeks a matter of uncertainty whether such and such an outbreak is really one of yellow fever or not? Why are people with the measles sent to small-pox hospitals, and others quarantined for acne? Such things happen far too often, and yet men acquire dazzling skill in "physical" diagnosis and grow wonderfully expert with all sorts of instruments. It is to be feared that this state of things is due in great measure to the fact that medical students, and those practitioners who resort to the great cities for supplementary instruction, have been dazed with the glamour of these fine accomplishments. It is the students that are at fault, for the teachers know well enough that it is general medicine that most needs to be dinned into the ears of the pupils, and that it is the ordinary run of fevers and the like, such as are to be found by the score in our hospitals, that should claim their chief attention; but, while they use all possible means to lead students to this path, they are met with deaf ears, except when the matter is one that has to be learned in order that an examination may be passed.

No doubt it is more attractive to pass one's time in striving after manual dexterity than in the more homely study of constitutional conditions, and to this fact we may impute the growing neglect of the good old habit of "walking the hospitals." It must be allowed, indeed, that the latter was often carried out in a perfunctory way, but none the less is there reason to think that the systematic study of cases of acute disease day after day would make men really good practitioners with far more certainty than any amount of manipulative training.

DO MORAL PRINCIPLES CHANGE WITH TIME?

WHEN our esteemed contemporary, the "Journal of the American Medical Association," put this question to the world several weeks ago, we did not anticipate that we should be able to give an early answer in the affirmative, with an example from the sanctity of its own "household." To be sure, the "household" has in times gone by furnished us with convincing evidence that in its opinion moral principles do change as the ages roll on, but just now the brethren are on their good behavior. "These be parlous times," and therefore it can not reasonably be expected that the lavatorial operations to which dirty linen requires to be subjected will at this particular epoch be performed before the gaze of a scrutinizing public.

But it seems there is at least one medical society in "good ethical standing" which believes not only that time is a soother of sorrows, as every one knows it to be, but also that it is able to convert a blood-curdling offense against the code into an act of such innocuousness that babes and sucklings, members of the association, and even an ex-president of that august body, would not be contaminated by its perpetration. Now, as every one knows that all offenses against the code are inherently immoral, the importance of this new therapeutical discovery can not be overestimated, especially as it is at the same time a complete answer to our contemporary's question.

It seems that a brother, whom we will call Dr. A., was desirous of becoming a member of the District Medical Society of Northwest Missouri, and that two other brethren, Dr. B. and Dr. C., were instrumental in so "fixing" matters that he was blackballed, on the ground that he had in some horrible manner violated the code. What he had done we are not permitted to know, but it must have been something perfectly dreadful, for never can he write the letters M. D. M. S. N. M. after his name, whether on sign, card, or title-page.

But Dr. A., instead of taking his punishment with becoming lamb-like meekness, turns upon his two enemies, who, we are told, are "prominent physicians of St. Joseph," and, notwithstanding the fact that they have been actuated by the highest ethical (and, of course, "moral") principles, proceeds to show that it is a fresh case of the pot calling the kettle black. Although not an adherent of the *tu quoque* line of argument, we must confess that occasionally it is not without a certain amount of force. He showed that Dr. B. had circulated a professional card on which was an engraving of the building in which he had his office. Whether it also represented the people of St. Joseph, "the sick, the halt, and the blind," rushing in crowds to the door in order to receive as soon as possible the professional advice of a highly ethical and moral physician, we are not informed. That it ought, in order to be fully effective, to have possessed this additional embellishment, is very clear. Half-measures are always indicative of weakness. This card, it seems, was "submitted to a prominent member, and an ex-president, of the American Medical Association for his opinion, who said that he knew of no rule of the code which it violated"—which is about as correct as if he had said that

there was no rule against a physician's going through the streets dressed in velvet and spangles, beating a drum, blowing a horn, and inviting the afflicted to come up and be cured. It is a very good code, but it does not prohibit these things.

Dr. A. also brought to light the card of Dr. C., which, besides setting forth his professional qualifications, exhibited the portrait of Jesse James, the eminent highwayman and murderer. What the connection may be between the practice of medicine and the portrait of Jesse James passes our comprehension, but perhaps the mystery is solved by the fact that Dr. C. issued this card "when he was running for the office of coroner," and presumed that propitiating Mr. James might lead that worthy to provide him with plenty of official work. We have heard of cases in which the portraits of saints have cured the ague, the small-pox, broken legs, etc., but that the likeness of a notorious criminal should be potent in politics is certainly a new fact in sociology.

However, these are deep questions, of which we must defer the consideration. Dr. A. brought his charges, and exhibited his documents in their support; but, notwithstanding the establishment of the additional offense that "their names had been used as a testimonial in favor of a sewing machine," Dr. B. and Dr. C. were triumphantly acquitted, and on the ground that the deeds with which they were charged were "committed some years ago." Thus we see that moral principles do change with time, and thus is our contemporary answered before the ink is fairly dry in which its query is printed.

MINOR PARAGRAPHS.

THE STATUS OF THE SURGEON-GENERAL OF THE NAVY.

THE Surgeon-General of the navy stands on a different footing from the officer of the same designation in the army, since he is not appointed to serve for an indefinite term, but for the period of four years, being in a certain sense detailed to the position, with the temporary rank of commodore. This fact is of interest in connection with a contention that seems to have arisen between the friends of the present incumbent, Dr. Wales, who maintain that his term of office does not expire until four years from the date of his commission, January 20, 1880, and his opponents, who affirm that he really ceased to be Surgeon-General on the 1st of August, four years from the date of his original appointment.

We are unable to see any flaw in the view held by the Surgeon-General's friends, and it is to be hoped that the bickering to which his appointment gave rise will not be carried to the length of an attempt to test the legality of his present tenure by an appeal to the Attorney-General, which rumor reports has been threatened. Nothing but entirely worthy motives can be ascribed to any gentlemen of the medical corps for aspiring to the office, but it will be an occasion for regret if they allow themselves to sanction such a petty policy as that we have alluded to.

THE NORRISTOWN ASYLUM HOMICIDE.

At a recent investigation before the Board of Trustees, one of the physicians of the institution stated that his assistant inspected the patients in the morning, and that he himself acted as a consulting physician, adding that they "attended to all cases worthy of consideration"; whereupon one of the trustees

interposed, saying: "Doctor, all cases up there are worthy of your consideration, are they not? The trustees think so, and we wish to correct public opinion on this score."

DEATH FOLLOWING THE BITE OF A SPIDER.

AN old gentleman living in Columbia, S. C., is stated to have died last week of erysipelas starting from the bite of a spider. Some interest has lately been taken in the fatal results that sometimes follow the bite or sting of insects not usually accounted venomous, and we have drawn attention to two or three cases of death imputed to the sting of the bee. In regard to this spider case, little importance is to be attached to it, as erysipelas may start from any wound.

NEWS ITEMS.

INFECTIOUS DISEASES IN NEW YORK.—We are indebted to the Sanitary Bureau of the Health Department for the following statement of cases and deaths reported during the two weeks ending August 28, 1883:

	Week ending Aug. 21.		Week ending Aug. 28.	
	Cases.	Deaths.	Cases.	Deaths.
Typhus	0	0	1	0
Typhoid fever.....	45	11	63	17
Scarlet fever.....	32	14	45	8
Cerebro-spinal meningitis....	3	3	2	1
Measles.....	20	10	22	8
Diphtheria.....	24	15	28	14

YELLOW FEVER.—The cases alluded to in our last report as having been detected in a sailors' boarding-house in the village of Woolsey, near the Pensacola Navy-Yard, proved to be those of some deserters from a vessel that had come from Limerick with a clean bill of health, and had not been quarantined. She cleared again the day the men reached the boarding-house, the 17th of August, the deserters having spent three weeks in a ramble up the bay. It does not seem likely that they brought the disease with them. Passed Assistant Surgeon D. M. Guiteras, of the navy, volunteered to go on duty at the Pensacola Navy-Yard last week, and was ordered there at once.

On Wednesday of last week a steamship from Vera Cruz and Havana reached the New York quarantine station, where she was detained, one of her engineers having been sick on the voyage, it was supposed with yellow fever. The passengers were allowed to come up to the city on Saturday.

On Friday, August 24th, a bark arrived at Portland, Me., from Vera Cruz, having had yellow fever on board. She was quarantined at Portland.

On Saturday, the 25th, the town of Pensacola was officially declared to be perfectly healthy, and its condition as to cleanliness excellent with the exception of a few houses. The people of the town had taken courage, and some of the neighboring towns had shown their confidence in the official report by removing the restrictions they had imposed on intercourse with the place. The same day three cases were reported from the navy-yard.

On Monday, the 27th, Mrs. Owen died, and her second daughter was attacked. At that date the marines were reported to be free from the disease.

On Tuesday, the 28th, Paymaster Brown died.

On Wednesday, the 29th, it was reported that all the fever patients were doing well, and that the town of Pensacola was still perfectly healthy.

Our Vice-Consul at Aspinwall telegraphed to the State Department, on the 27th of August, that that port was free from yellow fever and that the town was in good sanitary condition.

The foregoing facts go to show that the energetic action of

the Marine-Hospital Service, the medical corps of the navy, and the local sanitary officials seems to have been successful in checking the spread of the disease.

CHOLERA.—The disease has continued to decline steadily in Egypt, the daily number of deaths having fluctuated between eighty-one and two hundred and twenty-six for the whole country. On Sunday the disease was reported to have broken out in Sumatra.

THE STUDY OF THE CHOLERA IN EGYPT.—We have heretofore spoken of the French commission, under the direction of M. Pasteur. Another French investigator, M. Jules Aronssohn, of Paris, the professor of organic chemistry, is commissioned for the same purpose, and a German commission headed by Dr. Koch has set out for Alexandria.

TYPHOID FEVER AT RYE BEACH, N. H.—On Friday of last week the news reached New York that there was a good deal of sickness among the summer visitors at Rye Beach. It was at first supposed to be malarial, but it has since been shown satisfactorily that it was typhoid fever, due, it is thought, to the percolation of refuse matters into the drinking-water. Several deaths have resulted, but it is announced that the defects of drainage have now been remedied.

INFECTIOUS DISEASES OF DOMESTIC ANIMALS.—The Treasury Department has issued a circular to collectors of customs in which the following instructions are contained: "By Department circular of July 30, 1883, it is provided that 'Where there are more cattle for quarantine than the regular Government stations can accommodate, special arrangements for quarantine outside of the stations may be made by the collector of the port where they arrive, upon consultation with the Cattle Commission or the superintendent in charge.' You will observe that the responsibility in this matter rests upon the collector of the port in whose immediate custody the quarantine stations and the cattle therein are placed. While it is desired that the collector shall be in constant communication with the Cattle Commission, and that he should act in harmony with their views, he will not assume to make orders with regard to the cattle; and this Department will issue no instructions respecting the quarantining of cattle or for their transfer from one station to another or to any other place, except through the collector of the port. Where stations are crowded, the Department will rely upon the collectors at the respective ports to make such arrangements for quarantining cattle outside of the stations as the circumstances of each case shall seem to require."

Several valuable cattle are reported to have been poisoned at the Boston quarantine grounds from drinking water impregnated with Paris green that had been sprinkled over the ground at a time when it was used as a potato field.

A number of cattle that were recently taken from Montreal to Liverpool have been slaughtered at the latter port, as it was suspected that they had been infected with "Texan fever."

The "hog cholera" is said to have broken out in the northern part of Alabama.

A NURSE'S MISTAKE caused the death of a patient in the Blockley Hospital, Philadelphia, last week. The patient was an epileptic, and, as a paroxysm was threatened, a nurse hastily seized a bottle from a closet, and gave the man a draft of what he supposed to be a solution of bromide of potassium, but which turned out to be carbolic acid.

A BROOKLYN ABORTIONIST.—One Mrs. Furlong, of Brooklyn, is under arrest, charged with having caused the death of a Miss Charity Lewis, by an operation practiced for the purpose of producing an abortion. The coroner's jury found that the young

woman's death was due to metro-peritonitis. It is said that Mrs. Furlong admits having done the operation not only in this case, but in several others also. Dr. S. S. Doty was at first charged with complicity in the crime, but the evidence does not seem to have been sufficient to hold him.

THE NURSERY AND CHILD'S HOSPITAL.—Dr. Francis H. Markoe has been appointed on the visiting staff, in place of the late Dr. Livingston.

THE PRESBYTERIAN HOSPITAL.—A new pavilion, with room for twenty-eight beds, is expected to be ready for use in about a month.

THE HARTFORD HOSPITAL is reported to have had bequeathed to it, by the will of the late Mr. David Gallup, property which it is thought will exceed \$20,000 in value.

A NEW LUNATIC ASYLUM IN TOLEDO.—It has been decided to build the new Ohio State asylum on the outskirts of Toledo. One hundred and fifty acres of land have been obtained for the purpose, and the cottage plan will be adopted. It is said that the non-restraint system will be enforced.

THE UNIVERSITY OF BERLIN.—Professor Waldeyer, of Strassburg, has been appointed to the chair of anatomy, to succeed Professor Reichert.

THE UNIVERSITY OF PRAGUE.—Dr. Hans Chiari has been appointed professor of pathological anatomy.

SIR SPENCER WELLS, says the "British Medical Journal," has been elected an Honorary Fellow of the Physico-Medical Society of Erlangen.

A PHYSICIAN SHOT FOR REFUSING HIS SERVICES.—At Hoosick Falls, N. Y., Dr. F. R. Hudson was shot last week by a man whose wife he had declined to visit. The wounds are reported to be serious.

OBITUARY NOTES.

SURGEON ALFRED M. OWEN, OF THE NAVY.—Dr. Owen entered the medical corps of the navy in 1869. His last station was the Navy-Yard at Pensacola. In our last issue we gave an account of the outbreak of yellow fever at that station, and mentioned that at the time of our going to press Surgeon Owen had been prostrated with the fever, and was in a very critical condition. He died on Thursday of last week, at about the time the article referred to was written. One of his children was among the first victims of the outbreak, dying a few days before her father; Mrs. Owen has succumbed to the same disease since her husband's death; and now another child has been seized with it. Such a tale of woe, while it attests the devotion to duty called for from officers of the staff, and rendered by them, as well as those of the line, ought to go far toward blotting out the rancor felt by line officers of the navy for those they are fond of speaking of as "non-combatants." Dr. Owen's life was lost as truly in the line of duty as if he had had command of a ship, and been killed in action; and the profession may say of him and of his devoted family, *hæc mea ornamenta sunt*.

ASSISTANT SURGEON WILLIAM HOWARD KING, OF THE ARMY.—Dr. King died at his home in Philadelphia on Thursday, the 23d instant, in his forty-third year. During his service in South Carolina with the Union forces he contracted a disease of the bowels from which he never fully recovered, and his death was due directly to peritonitis. In May, 1863, Dr. King was appointed Assistant Surgeon of the 149th Pennsylvania Volunteers, and in August of the same year was appointed to the 21st Pennsylvania Cavalry as Surgeon with the rank of Major. November 16, 1868, he was commissioned First Lieutenant and Assistant Surgeon in the United States Army, and in October,

1869, was promoted to the rank of Captain. Early in 1882 his health compelled him to relinquish his duties at the station in Dakota, where he was serving, and he returned to Philadelphia, where he remained until his death.

HORACE POOLE WAKEFIELD, M. D., OF LEICESTER, MASS.—Dr. Wakefield died on Thursday, the 23d inst. He was born in Reading, Mass., January 4, 1809, and received his preliminary education at Bradford, Mass., and at the Pinkerton Academy, Derry, N. H., and in 1832 he was graduated from Amherst College. He received his Medical Degree at Dartmouth College in 1836 and settled in Oakham, Mass., where he remained until 1844, when he moved to Reading and continued the practice of medicine there until 1866. In 1879 he removed to Leicester, where he remained until his death. Dr. Wakefield was prominently identified with the interests of the towns in which he resided, having held various public offices, being elected to the Legislature from Oakham in 1843-'44, and State Senator from the Fifth Middlesex District in 1862-'63. He held the office of Inspector of the State Almshouse at Tewksbury in 1864, and from 1866 to 1868 he was a physician in that institution. For nine years he was Superintendent of the State Primary School at Monson, Mass. He was at different times a Councilor of the Massachusetts Medical Society, President of the Middlesex East District Medical Society, and *ex-officio* Vice-President of the Massachusetts Medical Society, before which he delivered the annual address in 1867.

MRS. MATILDA C. AYRTON, M. D.—Mrs. Ayrton died in London on the 19th of July, at the age of thirty-seven. She and Mrs. Elizabeth Garret Anderson attempted to gain admission to several English colleges some years ago, but, being repulsed, resorted to Paris, where they were welcomed at the school of medicine. The deceased wrote several books of travel, and was an ardent advocate of the co-education of the sexes.

Letters to the Editor.

THE SANITARY COUNCIL OF THE MISSISSIPPI VALLEY AND THE LOUISIANA STATE BOARD OF HEALTH.

SANITARY COUNCIL OF THE MISSISSIPPI VALLEY,
OFFICE OF THE SECRETARY, SPRINGFIELD, ILL., August 13, 1883. }

To the Editor of the New York Medical Journal.

SIR: I beg to call your attention to the following, without any comment other than the remark that nowhere in my report is there any claim that the Sanitary Council has done anything more than *supervise the inspections* formerly maintained by the National Board of Health.

Extract from report of proceedings of the Louisiana State Board of Health, at its regular meeting in New Orleans, August 9, 1883:

In relation to a report of Dr. John H. Rauch, secretary of the Sanitary Council of the Mississippi Valley, to President Hadden, published in one of the Western journals, Mr. Booth offered the following resolution:

Whereas, It appears that Dr. J. H. Rauch, of Springfield, Ill., signing himself as Secretary Sanitary Council of Mississippi Valley, has made a report to President Hadden, of Memphis, wherein it is stated that the late National Board of Health and the present Sanitary Council of the Mississippi Valley have so successfully conducted the Louisiana and Mississippi quarantine during 1883 that it is no longer necessary for a sanitary council inspector to remain at said quarantine, and that, consequently, said inspector had been withdrawn, with much other alleged information touching the conduct, statistics, management, and

general work done and action had at said quarantine, intended, doubtless, to misrepresent the situation in so far as to lead to the belief that this board was not, and the Sanitary Council was, attending to the health affairs of the State and valley, as they stand affected by their relation to the Mississippi River and its commerce with tropical countries;

Therefore, as such belief would be based upon erroneous grounds, to the detriment, as far as entertained, of the standing of this board before the people;

Be it Resolved, That the board protests against the statements of said Secretary Ranch as a tissue of curiously interwoven statistics in themselves true, but perverted by a malignant intelligence to the uses of falsification and perversion, incredible in persistence and monumental audacity.

Resolved, That a copy of this paper be sent to the president of the Sanitary Council of the Mississippi Valley, that he may lay it before the association at their next meeting, with a view to the removal of said Dr. Rauch from an office which he puts to so poor or so bad a use.

The resolution was adopted by a unanimous vote, after which the board adjourned.

Full text of the report, characterized by Dr. Joseph Jones, President of the Board, and Mr. Booth, a member, as "false and libelous" in "statements and tenor":

Dr. Rauch, the executive officer of the Sanitary Council of the Mississippi Valley, has completed his report of the operations during the month of July of the inspection service, formerly maintained by the National Board of Health, but now supervised by the council. From this it is learned that, at the Mississippi River Quarantine Station below New Orleans, there have arrived during the quarantine season seventy-three vessels from foreign ports. Of these, forty-seven were inspected up to June 30th, under the supervision of the National Board of Health, and during July the remaining twenty-six were inspected under the supervision of the Sanitary Council.

Of these, eleven were from ports infected by yellow fever at the date of departure, and three of them—namely, the *Berna*, July 3d, the *Merchant*, July 16th, and the *Buteshire*, July 17th—arrived with cases of yellow fever on board. Among the remaining vessels, one was found to have had yellow fever on board in Havana last season, and in seven other cases it was probable that they had been infected at some previous time.

The sanitary condition of the vessel, crew, cargo, and passengers in twelve cases was good, and in the remaining vessels, with the exception of the *Berna*, *Merchant*, and *Buteshire*, which were infected, the report of the inspector was qualified. In all cases the vessels were subjected to a thorough general cleansing, purification of bilge, hold, etc., and disinfection with carbolic acid and copperas, and the cargoes were fumigated with sulphurous acid gas.

Coffee ships from Rio de Janeiro were either not allowed to proceed up to New Orleans at all, or only after removal of cargo and thorough fumigation of the same.

The arrival of the *Merchant* on the 16th of July, and of the *Buteshire* on the following day, both from Vera Cruz, with yellow fever cases, finally led the Governor of Louisiana, on the 20th of July, to recommend to the Louisiana State Board of Health that no infected vessel be permitted to enter the Mississippi River, and that all infected vessels then at the quarantine station be removed out of the river at once, assigning the reason that their presence at that point had practically rendered the station an infected port in dangerous proximity to New Orleans, and threatened a stupendous calamity to the Mississippi. At its meeting, on July 23d, the board discussed this communication, and on the 24th Governor McEnery issued a proclamation enforcing his recommendations, and declaring non-intercourse between Louisiana and Vera Cruz, Rio de Janeiro, Havana, and other infected ports.

The infected vessels have been removed to Ship Island, and for the first time in a number of years the lower Mississippi is freed from the menace arising from the admission of yellow-fever ships to the river.

Immediately upon receipt of information of this action, the request previously preferred to Governor McEnery to permit the sanitary council inspector to remain at the quarantine station, was withdrawn by

telegram, and the inspector was relieved from duty as soon as the infected vessels and yellow-fever patients were removed.

It is remarked in this connection that while the National Board of Health and the Sanitary Council have been advocating for the past four years the exclusion of infected vessels from the Mississippi during the dangerous season, and the use of Ship Island as a refuge station for such vessels, the necessity for absolute non-intercourse has not been recognized. The plan proposed by these two bodies contemplated the maintenance of an inspection station at or near Port Eads. All vessels entering the river would here be subjected to a rigid examination. Those found to be infected would be compelled to go to the Ship Island refuge station; healthy vessels from infected ports would be subjected to such treatment as would render it safe to allow them access to New Orleans; while all others, if found in a good sanitary condition, would be passed without detention. In this way it was believed the public health could be properly protected without inflicting such serious injury to the commercial interests of New Orleans as a non-intercourse quarantine necessarily entails.

The executive committee of the council, however, does not feel warranted in criticising any action which promises to secure the safety of the valley from an invasion of yellow fever.

During the month forty-five steamboats and other river craft, with an aggregate capacity of 44,219 tons, and carrying 2,532 officers, crews, and passengers, were inspected at New Orleans, and furnished with the certificates of the Sanitary Council. On the Illinois Central and Louisville and Nashville railroads, at the same point, 144 freight trains bound northwise, and their crews, comprising 1,194 persons, were also inspected.

At the inspection stations at Fort Adams, Miss., and President's Island, Tenn., all north-bound vessels are now inspected, as well as those plying in the local trade and those clearing from New Orleans. The total inspections for the month at these stations comprise 123 steamboats, tows, barges, etc., carrying 5,352 persons. The sanitary condition of these vessels is reported as satisfactory, and an entire freedom from illness of a suspicious nature is noted.

An aggregate of 338 ocean vessels, river craft, and freight trains, together with 9,342 officers, crews, and passengers, has been inspected under the supervision of the council during the month.

I send you this as a fair illustration of the methods and animus of the Louisiana State Board of Health.

Very truly yours,

JOHN H. RAUCH.

Proceedings of Societies.

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

THE thirty-second annual meeting was held at Minneapolis, Minn., August 15 to 22, 1883, the President, Professor C. A. YOUNG, of Princeton, N. J., in the chair. For the most part the proceedings had no bearing upon medicine, and our summary will therefore be brief.

CONSCIOUS AUTOMATISM.—Dr. CHARLES P. HART, of Wyoming, Ohio, read a paper in which he stated that it was not his object to discuss cerebral automatism in all its relations, but only with reference to man, and that, too, in a single particular. The question he endeavored to answer was: "Are the higher automatic actions in man—that is, actions which are usually of a voluntary character—ever entirely and exclusively automatic? In other words, when the organ of mind—the cortical substance of the brain—is present and in a normal condition, do the higher automatic actions—those which usually display intelligence—ever take place wholly independent of, or uninfluenced by, that organ, as taught by Carpenter, Althaus, and other leading physi-

ologists of the day?" After quoting the illustrations given by the last-mentioned author in the "Nineteenth Century" magazine for December, 1879, he maintained that, in the cases cited, the cortical centers influenced the so-called automatic movements to a greater or less extent; otherwise, when a certain succession of acts was to be performed, there would be nothing to limit and define them as a whole, i. e., as a series, or to separate them from others of a similar character, which, from habit or education, had become equally automatic. Various illustrations were then given, special reference being made to the two forms of aphasia, the ataxic and the amnesic, the anatomical and physiological basis of which, the author thought, fully confirmed his views.

He then quoted from Ferrier to show that destruction of the cortical motor centers in man caused such complete and enduring motor paralysis as to indicate that automatism in and by itself was scarcely detachable from the centers of consciousness and volition. Illustrative cases were then given to show that when the mind was so intensely occupied in thought as to be almost entirely withdrawn from the automatic action performed by the lower centers, mistakes were frequently made, the "absent-minded" person running against objects when his eyes were wide open and his vision was unobstructed, going into the wrong house, and committing other like errors.

The author then took up the phenomena of somnambulism, which were supposed to prove the correctness of the received theory of perfect uncontrolled automatism, and showed that instead of lending any support to the theory of independent ganglionic automatism, they were directly antagonistic to it, since the mind of the sleep-walker was intensely active, and governed his movements in the most perfect and pronounced manner.

In short, to sum up the whole matter, the author reached the conclusion that the cortical substance of the brain, when normally present, was, in the case of man, seldom or never without influence of some sort or degree upon the automatic centers.

THE USE OF VASELINE TO PREVENT LOSS OF ALCOHOL FROM SPECIMEN JARS.—In a paper with this title, by Professor BURT G. WILDER and Dr. SIMON H. GAGE, of Ithaca, N. Y., attention was called to the fact that the petroleum preparation termed vaseline was known to be practically unaffected by ordinary temperatures and by most substances. In the "Journal of the Chemical Society" for July, 1882, p. 785, it was said to be sparingly soluble in cold, strong alcohol, and completely in hot, but to separate out on cooling. After trying various substances—wax, paraffin oil, and glycerin—with but partial success, the use of vaseline was suggested by the two authors independently and nearly at the same time. The experiments tried last spring indicated that during three months, at ordinary spring and summer temperatures, there was no appreciable loss of 95-per-cent. alcohol from glass phials or jars, whether upright or inverted or on the side, provided the corks were smeared on the bottom as well as on the side. Ground-glass stoppers were anointed and firmly inserted, and the rubber rings of fruit jars and the specimen jars made by Whitall, Tatum & Co., were coated on both sides and the covers well screwed down. The authors had also used the vaseline for preventing the loss of other liquids, including chloroform and oil of turpentine; as a lubricator of drawers, and to prevent the sticking of the covers or stoppers of cement phials; and for the prevention of rust upon steel instruments.

ANÆSTHETIZATION WITH NITROUS OXIDE AND AIR, OR NITROUS OXIDE AND OXYGEN, UNDER PRESSURE.—Dr. E. P. HOWLAND, of Washington, read a paper in which he embodied the conclusions derived from a large personal experience with M. Paul Bert's method of using nitrous oxide as an anæsthetic, and demon-

strated the process. He believed that the plan would yet supersede the use of ether and chloroform. The reason why nitrous oxide, as ordinarily administered, could not be used for prolonged operations was, that the blood could get no oxygen from the agent, for it was expired unchanged, so that asphyxia was produced. Pure nitrous oxide, therefore, could never be made practicable for long operations. In the author's experiments with it on animals, death generally occurred in two minutes and a half. If air or oxygen were mixed with it in sufficient quantity to prevent asphyxia, it would not produce anæsthesia. Under pressure, however, these objections were done away with.

The author then gave a summary of M. Bert's experiments, and cited a number of instances in which French surgeons had performed capital operations under anæsthesia by the method in question. The paper closed with the following conclusions:

1. Nitrous oxide, administered under pressure, and mixed with oxygen, produces within several seconds a profound insensibility.

2. Under these conditions, life may be indefinitely sustained without the least danger of asphyxia.

3. In augmenting or diminishing the pressure, the degree of anæsthesia may be regulated at will, and with mathematical precision. Therefore, there is no danger of any of the accidents incurred through the use of ether or chloroform.

4. When inhalation of nitrous oxide and oxygen is stopped, the patient recovers consciousness in a few seconds and feels no consequent discomfort.

5. Nitrous oxide is merely dissolved in the plasma of the blood and escapes when inhalation ceases.

6. Its use causes no trouble to nutrition and no change in the chemical composition of the organs or cessation of their functions.

7. The action of compressed air upon the operator and his assistants need not be feared. Compressed air is very efficacious in the treatment of catarrh of the mucous membrane of the nose, the Eustachian tube, and the respiratory organs.

8. By reason of these facts, a mixture of nitrous oxide and oxygen is superior to ether or chloroform, whether we consider its profound anæsthetic effect or its freedom from injurious results.

9. If the pressure of the air chamber is rightly and properly regulated it is absolutely impossible for the patient to run any risk from the anæsthesia alone.

10. In all that concerns the application of nitrous oxide and oxygen to surgery, the scientific phase may be said to be exhausted, and this anæsthetic agent should be henceforth used for operations of prolonged duration instead of ether and chloroform.

Dr. Howland then demonstrated the process: A small box was provided to serve as an air chamber, in which glass windows and a door were set and properly sealed. In this box a live chicken was placed. Into the chamber, by means of stop-cocks and rubber tubes, pure nitrous oxide was first forced from a gas bag, producing insensibility in the chicken in the space of forty seconds. This was immediately followed by the mixture of nitrous oxide and oxygen, introduced from an iron reservoir, by means of which anæsthesia was sustained for seven minutes at a pressure of four pounds to the square inch. The chicken was then removed from the chamber, feathers were plucked from it for five seconds subsequent to its removal without eliciting signs of pain, and within twelve seconds consciousness was fully restored. It was again placed in the box and pure nitrous oxide was introduced, with the result of causing death in fifty seconds. On removal and decapitation of the bird, its blood was found to be in a non-arterialized condition.

COLLEGE OF PHYSICIANS OF PHILADELPHIA.

(Concluded from page 219.)

To determine the average distance of the storm-center at the beginning of the pain attacks, sixty well-defined storms through ten consecutive months were taken, and it was thus found that the average distance was six hundred and eighty miles, ranging from two hundred to twelve hundred miles.

Storms from the Pacific are felt the farthest off very soon after crossing the Rocky Mountains. Those which move along the coast from the Gulf of Mexico are associated with neuralgia not quite so intense, and are not felt, as a rule, until within the average neuralgia distance.

If neuralgia begins on a low and rising barometer, the ridge of high pressure between this and the coming storm depression is narrow and invariably broken down within seventy-two hours, and more frequently within twenty-four or thirty-six hours; and during this rise, coincident with the pain, the differ-

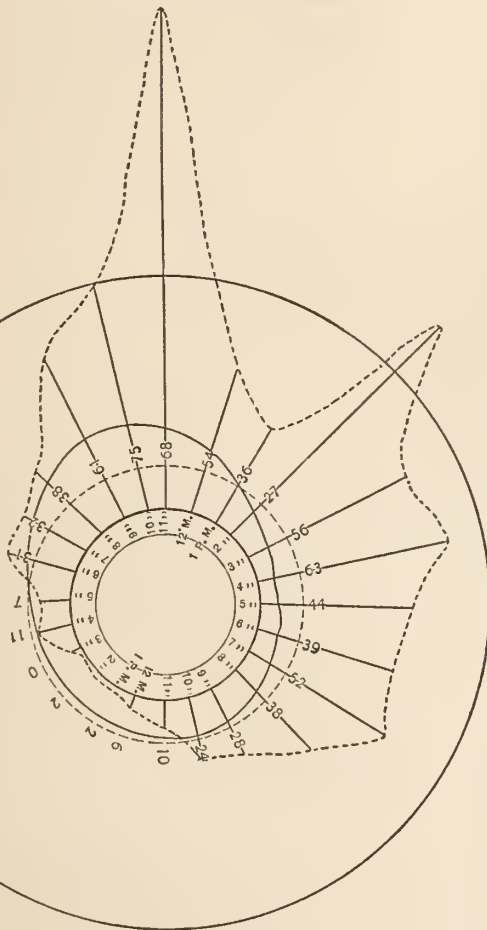


FIG. 5.

ence between the wet and dry bulb thermometers, instead of increasing as is usual with this barometrical condition, sometimes actually diminishes, or increases for a few hours only, and then diminishes, showing increasing humidity.

When this pain and instrumental condition obtains, the coming storm depression will carry on its eastward side clouds and increasing moisture, and sometimes rain or snow, clear over the summit of the advancing high area pressure in front of it, holding an unusually high degree of relative humidity in the air on the high eastern slope of the high barometer area. These are the conditions when the pain attacks on the rising barometer. Its normal condition, however, is with a falling, but it

may be a high barometer, rising temperature, and increasing relative humidity.*

Should the pain be on during a day of intermitting rain, the pain takes an additional activity just before the increasing shower, and continues twenty to forty minutes; this will sometimes happen four or five times in twelve hours. Each little increment of pain seems to bear about the same relation to the showers as the main attack bears to the storm.

For the hourly relations of pain, see curve (Fig. 5), which shows the number of times the pain began on each hour of the day. The time of record extends over a period of more than eleven years, commencing September, 1871, and is continuous since October, 1874.

It has always been observed that eating a meal when the pain is on intensifies it, and it is believed that it often hastens the attack. We should then expect to find some rise in the curve after each meal. This we do find at 9 A. M., which can not be accounted for otherwise than that, by eating at 8 A. M., some of the neuralgia, which really belongs to ten o'clock, has been prematurely developed and so changed to nine o'clock. Again, after the one o'clock meal there is a decided rise in the number, some of which, at least, should be chargeable to the meal. It is also worthy of note that there is an ebb-tide in pain just preceding the meals; not so marked before breakfast, partly, no doubt, because it is with me a little less regular than other meals, and partly because storms coming within neuralgia range during the early and middle sleeping hours would not ordinarily arouse their victim, but would strike in the morning as the sleep became less profound.

This, doubtless, is the cause of the rapid rise in the curve between 5 and 6 A. M.

In support of this statement of the respect which a storm may have for its neuralgia subject, it may be added that, if the pain is on when the patient falls asleep, and he is aroused or awakens during the night, he will find himself free from pain; but if he should move about, or stay awake fifteen or twenty minutes, the pain is renewed, unless, in the mean time, the neuralgia time has expired.† At 11 P. M. the average number of attacks is not one a year, and from this time until 6 A. M. there is great immunity from onsets of pain.

With regard to the prominent and remarkable feature of the curve on the 11 A. M. ordinate, it can not be positively stated why the pain has shown this great partiality; but there are some reasons which may be of interest to state. We have found that the years of high mean annual pressure gave high pain readings. We have also found that neuralgia, in its relation to storms, was not averse to a high barometer, but usually attacked on a falling barometer with rising temperature or increasing humidity.

The diurnal oscillation of the barometer is indicated by the elliptical curve in Fig. 5, which has for its ordinates the distances from the curve to the dial circle, and for its abscissas the hours of the day. The difference between the maximum and minimum pressure is 0.045 of an inch. The minimum occurs about 4 P. M., and the maximum between 9 and 10 A. M., and begins its decided fall between 10 and 11. This brings the pain, then, in its relation to the diurnal change of the barometer, to a position analogous to what we found it in its relationship

* See same case in "American Journal of the Medical Sciences" for April, 1877, p. 21.

† This is true in regard to most pain, and may be within the experience of many men: we fall asleep suffering, but awake without pain, even if the cause of pain remains. A brief period of being awake seems to be needed, in order that the cause become active. Sleep is a true anæsthetic.—S. W. M.

the direction of the storm S. E. there were increasing cirrus and cirro-stratus, with bunches of cumuli lower. This storm "united with No. I over the St. Lawrence. Later in the day thunder-storms in northwest to northeast." The attack of May 31, 1879, corresponds to the extensive storm of No. XV of Signal Bureau Report for the month.

The attack of October 16th corresponds to Storms IV and V; the former, coming up the Mississippi Valley, unites with the latter, from the North Pacific, in Lake Michigan.

The attack of April 10, 1881, is related to Storm III, including Storms II and IV as described by the Signal Bureau Report.

It was observed on this occasion, as is frequently the case with this variety of pain, as also in the ordinary kind, that there was a cloudless sky with a delicate milky sheen in the atmosphere, more marked around the horizon. This milky veil becomes more opaque, and the first pronounced cloudiness will be small patches of cumulus, at lower elevation than this hazy appearance. These are storm indications, and favorable for the production of pain. This was the stabbing variety, as in each case here described, added to the other varieties, and was active between the heel and left side of foot. (See diagram.)

The attack of February 11, 1882, corresponds to Storm VI as marked in report of Signal Bureau. At the time the attack began, the center of the storm was six hundred miles westward. This was of wide lateral range, and is the only one charted for the month as coming from the Pacific coast.

For attack of November 17, 1882, Professor Carpmail, Superintendent of the Toronto Observatory, reports more than ordinary declination and force disturbances from the 10th, including the 16th, when "they evidently showed signs of a coming storm." The magnetic storm set in at 5 A. M. on the 17th, and continued with great and intermitting force all day and night, and did not quiet down till midnight of the 18th. The report says, referring to the evening of the 17th, "that the force (horizontal and vertical) instruments which in the early part of the storm showed a general decrease, now showed an increase, and between 7 P. M. and midnight the lights several times traveled to both ends of the paper, the bifilar going off a number of times." The extremes of declination were reached easterly at 6.25 P. M., and westerly at 9 P. M. On the 19th the magnets were disturbed, the disturbances being greatest between 11 P. M. of the 19th and 4 A. M. of the 20th. Many of the force movements were swift and rapid, the last movement of importance occurring at 9.20 P. M. on the 20th. Brilliant auroras reported on the 17th.

This storm was unusually severe in England, with brilliant aurora on the 17th. The disturbances here probably did not differ materially from those reported from the Toronto Observatory.

There was from the 10th inst. great unrest in all the nerves of the foot, such as feelings of twitching and slight burning, and at no time did the agitation touch the zero line of no pain. At 2 P. M. of the 17th the intense stabbing pains set in and reached the maximum power from 4 to 7 P. M. They continued, however, with great force until 5 A. M. on the 18th, and intermitting and less strong fits of torment were felt till evening; then a period of rest occurred until 9 A. M. of the 19th, when a severe attack of the regular neuralgia set in, with more or less burning and twitching pains throughout the foot, which lasted more than thirty-one hours, and finally went off on the evening of the 20th. The intense neuralgia of the 17th seems connected with the magnetic storm of the 17th, for there was no storm of barometric depression charted by the Signal Bureau within neuralgic range for this date. The last storm preceding this time was storm No. 11, which started from the Pacific on the 8th, and for which there was a regular neuralgia on

the 9th and 10th. The next storm was No. III, which originated in Texas on the 18th, and the attack of pain of the 19th and 20th was for this storm aggravated by the magnetic condition of these dates. It is firmly believed that neuralgia accompanies intense auroral periods, but, owing to their rare occurrence, it can not be said that the proof is conclusive. The conjunction of the two seems too frequent for mere coincidence.

In regard to treatment, etc., I can say but little. There has been no treatment in a medical way of late. I have had good health; take a great deal of exercise, but in a rather irregular way; my appetite is always good, and I sleep well, except when the disturbance of neuralgia interferes. For the year 1878, in which occurred the greatest diminution of pain for any year, there was the greatest physical weight, reaching one hundred and ninety pounds. Physical exercise, nutritious food (have found milk most fattening of all), and light, agreeable occupation, are, I found, the best regimen for this neuralgic subject.

NEW YORK MEDICAL AND SURGICAL SOCIETY.

A STATED meeting was held March 10, 1883, Dr. T. F. Cock chairman for the evening.

UNUSUAL EFFECTS OF ANÆSTHETICS.—Dr. F. N. Otis related a case in which, after an operation for phimosis upon a child two years of age, he had removed the stitches while the child was slightly under the influence of ether. Shortly afterward he looked at the child, and found it in good condition; but as he was about to drive away, Dr. L. B. Bangs, who had seen the patient last, remarked that he looked a little pale, and he returned to the room to make sure that everything was right. Very much to his surprise, he found the child in a state of collapse—pale, pulseless, and not breathing. He immediately practiced artificial respiration. The child was soon completely restored. Dr. Otis remarked that this was the only case in which he had observed any tendency to collapse so long after the administration of the anæsthetic.

Dr. FORDYOE BARKER said that in Dr. Otis's case the child was not fully under the influence of the ether. The nervous and vascular systems were in a high state of excitement, and afterward there probably came a reaction, a condition of partial collapse. He asked whether any case had been reported in which a child under ten years of age had died under the influence of chloroform.

Dr. A. C. Post said that a child was once brought to the late Dr. Buck for some affection which rendered it necessary to employ an anæsthetic on several occasions, and the father preferred that chloroform should be administered. Dr. Buck, however, objected, on the ground that it was more dangerous than ether. On one occasion, when Dr. Buck could not attend to the case, the child was taken to another physician, who had no objections to the use of chloroform. It was administered, and the child died under its influence.

Dr. FRANCIS DELAFIELD remarked that a number of cases of death from chloroform in children under ten years of age had occurred in New York, one under his own observation.

Dr. Otis asked whether any case had been reported in which death from ether had occurred in a child.

Dr. DELAFIELD believed none had been reported except where strangulation took place during vomiting. With regard to Dr. Otis's case, it was doubtful whether the state of partial collapse could be attributed to the direct influence of the ether. We all knew with what comparative ease children under three and four years of age were sometimes seized with a temporary feebleness of the heart's action, with apparent collapse. Sometimes it could be attributed to a slight attack of indigestion; sometimes there was no apparent cause, yet the symptoms were

exceedingly alarming, and the collapse continued for several hours. Only last week he had seen such a case in a child two years old, that for an hour looked as if it would surely die. There was no apparent cause, and the child had been in perfect health. The next day it was as well as ever, and had shown no symptom of sickness since. He thought that the collapse in Dr. Otis's case was probably due rather to the vomiting and the struggling than to the direct effects of the drug itself.

Dr. Post remarked that he had seen but two cases in which a fatal result had attended the administration of ether. One occurred in the New York and the other in St. Luke's Hospital. The operations were done for tumors of the neck which compressed the larynx and the trachea, and difficult breathing was superadded to the influence of the ether. The patients died on the operating table.

Dr. B. W. McCREADY thought that when a person, particularly a child, was about to undergo an operation, the heart's action, influenced by fear, was usually comparatively feeble. If chloroform were used, not being disagreeable to the patient, it produced no reaction, took effect rapidly, and was likewise a depressor of the heart's action. Ether, on the other hand, acted slowly, was disagreeable, and always caused the patient to struggle more or less, and he thought the heart, perhaps, had an opportunity to regain its power of action before the depression attending complete anaesthesia came on.

Dr. C. R. AGNEW thought it our duty, before administering anaesthetics to the extent of full anaesthesia, to ascertain the state of the kidneys, so far as possible, and to make sure that the patient was not suffering from any condition contraindicating the anaesthetic.

Dr. Post alluded to the advantage of "primary anaesthesia" for slight operations.

Dr. R. F. WEIR remarked that, with regard to the kidney symptoms which sometimes developed after anaesthetization, it was often difficult to say whether they were due to the direct influence of the drug or to surgical fever.

Dr. Otis remarked that dropping of the uplifted hand was not a sure sign of the presence of the stage of anaesthesia referred to; he had recently seen the arm remain rigid in an upright position some time after the inhalation had ceased.

CHANCRE OF THE MOUTH CONTRACTED DURING ABNORMAL COITUS.—The case was observed in Dr. WEIR's service in Bellevue Hospital in November. A boy nine years of age was admitted for compound fracture of the leg. About a week afterward a general eruption broke out, which was recognized as syphilitic. There was an enlarged gland just below the angle of the jaw on the left side, and further examination disclosed a chancre of the corresponding tonsil. The boy said he had been induced by a man to take part in the abnormal coitus that gave rise to the sore about six weeks before the eruption had appeared. Dr. Robert W. Taylor had confirmed the diagnosis.

A STATED meeting was held March 24, 1883, Dr. T. F. Cock chairman for the evening.

TRAUMATIC DEVIATION OF THE SEPTUM NASI.—Dr. A. C. Post mentioned the case of a girl, seven years of age, who, about two years ago, fell and injured the nose, causing a deviation of the septum so far to the left as materially to interfere with breathing through the left nasal passage, and giving a nasal twang to the voice. Instead of trying to make direct excision of the displaced portion, according to the ordinary, and, he believed, rather difficult method, he made a transverse incision through the columna nasi, then separated the divided portions, turning the one forward and the other backward, thus exposing the lower part of the septum, and enabling him to circumscribe the displaced septum with the curved scissors and remove it.

HÆMORRHAGE FOLLOWING TREPHINING OF THE MASTOID.—Dr. H. D. NOYES, by invitation, narrated a case as follows: The patient, a girl, sixteen years of age, had been under his care for chronic otitis media of both sides during the past eight years. On Sunday last severe symptoms developed, suggestive of meningitis. There was slight vomiting, a chill, then great elevation of temperature and frequency of the pulse, mild delirium, and severe headache—symptoms which continued for four days. When he saw the patient there was unmistakable deep-seated tenderness in the region of the squamous portion of the temporal bone on one side. Feeling that the symptoms were not likely to be relieved by the incision made over the mastoid, he determined to trephine just on a level with and half an inch back of the external auditory canal. After penetrating to a slight depth with the sharp pointed drill, a square one was substituted. At a depth of a quarter or three eighths of an inch this suddenly dropped into a cavity, and he felt the impact of the instrument against the opposite bony wall distinctly. The drill was withdrawn and an attempt was made to ream out the hole by which it had entered slightly, to allow free exit of any fluid that might be present, but there suddenly occurred such a free flow of venous blood that, for a moment, he feared the lateral sinus might have been opened. But, in the light of the anatomical structure of the parts, this appeared impossible. A cotton tampon was introduced, the hæmorrhage ceased, and the severe symptoms from which the patient was suffering had since disappeared to a considerable extent. This was the first case in his experience in which trephining the mastoid had been attended by severe hæmorrhage.

Dr. Post remarked that the veins in the diploë of the bones of the skull were sometimes quite large, and that possibly Dr. Noyes had accidentally struck one of these in the mastoid.

Dr. NOYES remarked that it was well known that a large vein passed through the mastoid, but its locality was uncertain.

ABSCESS OF THE CEREBELLUM; SUDDEN DEATH.—Dr. G. G. WHEELLOCK related the case of a woman at the Nursery and Child's Hospital who, about three weeks after delivery, was attacked with a slight pelvic inflammation, and was removed to the annex. The temperature was only slightly elevated, and before that there had been no symptoms whatever. She had been deaf for many years, the result of chronic otitis media on both sides. One night recently a slight discharge took place from one ear, and the patient seemed to be a little stupid. Without any warning, while being served by the nurse to a glass of water, she suddenly threw her arms up and appeared to be dying. Attempts were made at resuscitation, but within four minutes all signs of life had disappeared. At the autopsy the next day an abscess an inch and a half by an inch in diameter was found to occupy the right lobe of the cerebellum at a point just posterior to the petrous portion of the temporal bone, which was supposed to have caused death suddenly by pressure upon the respiratory center. There was also adhesion of the membranes to the bone at this point, and, with the slightest force, a thin shell of the bone was broken through and a cavity disclosed which was found to contain cheesy material. The peculiarity of the case consisted in the absence of brain symptoms.

Dr. NOYES remarked that the number of cases in which the disease produced no cerebral symptoms was not small.

Dr. Post thought it was not uncommon for physicians to tell the parents of children who had otorrhœa that they would outgrow it, and that they need not pay any attention to it. He believed, however, that it was a very serious mistake to let such cases go untreated.

Dr. NOYES added that to differentiate between the symptoms of meningitis and those which were due to inflammation con-

fined to the region of the mastoid was sometimes quite difficult. In the case he had related he had been actuated, by prudential reasons, and a previous knowledge of the case, not to wait longer, but to perforate the mastoid so early as the fourth day. He had also made an ophthalmoscopic examination, to see if there existed what had been found in a number of this class of cases at the early stage, namely, acute inflammation of the optic nerve on the side corresponding to the ear lesion. Optic neuritis, however, did not exist, but one portion of the nerve was found to be intensely vascular, while the remainder was normal, and this fact, taken with the others mentioned, he believed justified the operation.

A STATED meeting was held April 14, 1883, Dr. WILLIAM N. BLAKEMAN chairman for the evening.

PROBABLE INJURY OF THE HEART DUE TO A FALL.—Dr. A. C. POST said that a young man presented himself at his clinic to-day, complaining of certain symptoms caused by a fall sustained a week ago, while staggering under a load of lumber. He was afterward able to walk to a conveyance, but was very feeble and suffered distress. Upon examination, no evidence of contusion or fracture could be discovered, but the patient complained greatly of pain, distress, and tenderness over the region of the heart, particularly when percussion was made. The pulse was very rapid, feeble, dicrotic, and irregular, and the heart's action was jerky, feeble, and tumultuous, but no abnormal sounds or percussion outlines were discovered. Possibly there had been rupture of some of the endocardial tendinous cords.

EPIDEMIC CONJUNCTIVITIS.—Dr. C. R. AGNEW said that he had seen within the past six weeks an unusual number of cases of conjunctivitis; a larger number than at any period since the agitation occurred in this city with regard to dirty streets more than a year ago, at which time the occurrence of a peculiar type of conjunctivitis was supposed by some to have been due to the great amount of pulverized filth which was being wafted by the winds. The type of conjunctivitis which he had lately seen resembled very closely that which existed at that time, yet we had not, owing to moisture in the atmosphere up to the present time this spring, been much afflicted with dust. The disease was peculiar in the fact that there was intense redness, starting in the retro-tarsal fold, extending to the conjunctiva of the lids, and thence to that of the eyeballs, while there was very little or no mucous secretion. It was not confined to the city; cases were reported from other portions of the State. A similar epidemic existed in 1827 or 1829. That the epidemic of last year was not caused, in the first place, by the filth of the streets, was evident from the fact that many cases occurred in the country, both in New York and in New Jersey, particularly in the town of Woodbridge, in the latter State. These facts should make us cautious in attempting to assign as a definite cause for endemic diseases some condition which might at the time happen to annoy us. He asked Dr. H. D. Noyes if he had observed an unusual number of cases of acute conjunctivitis during the past six weeks.

Dr. NOYES replied that he had been less struck with the prevalence of conjunctivitis than with catarrhal conditions of the ear of a troublesome character.

THE RELATION OF LACERATION OF THE CERVIX UTERI TO EPITHELIOMA.—Dr. ROBERT WATTS said that the opinion frequently expressed by Dr. Emmet with regard to the etiological relation between laceration of the cervix of the uterus and epithelioma in that situation was well known. The following cases perhaps had some bearing upon that point. Within the past two months a woman entered the Roosevelt Hospital who had been losing blood constantly for four weeks previously. On examination, a pretty extensive laceration of the cervix was dis-

covered, and springing up from the anterior lip was a cauliflower-like growth about as large as half an English walnut. Slight handling caused hæmorrhage. It was curetted, and the surface from which it sprung was deeply cauterized. The wound had since healed perfectly, and the patient was now in condition to have the laceration repaired. The specimen had been examined by Dr. Delafield, who stated that it was just on the border-line between simple papilloma and epithelial degeneration, and that, undoubtedly, had it been allowed to remain any length of time, it would have assumed all the characteristics of a real cancerous growth. About two years ago Dr. Watts treated a case in the same manner, in which, although there was not a cauliflower-like growth from the cervix, the lining membrane was very vascular, and a specimen under the microscope presented the same appearances as in the present case. The patient had since had several attacks of profuse hæmorrhage, but was otherwise in perfect health, and there had been no recurrence of the local disease.

PROLONGED INTRA-UTERINE GESTATION.—Dr. T. F. COCK mentioned the case of a primipara who, after a single coitus, was delivered of a child on the 289th day. The case was well authenticated.

A STATED meeting was held April 28, 1883, Dr. H. F. WALKER chairman for the evening.

ERYSIPELAS MIGRANS.—The CHAIRMAN was lately called to see a female child, two years and a half old, on account of a slight degree of fever. He was unable to account for this symptom until the following day, when the mother incidentally said that the child had a little difficulty and pain on urination. On examination, he then found the left labium majus considerably swollen, and the case appeared to be one of follicular vulvitis. The next day, however, it became evident that it was erysipelas. It gradually extended down the left thigh and up on the abdomen, and, clearing up on these parts, continued to extend down the left leg to the ankle, and spread to the right thigh, where it pursued a similar course as far down as the ankle, when convalescence set in. Some small abscesses formed upon the lower limbs. He had seen but one similar case before, which also occurred in a female child, and the erysipelatous inflammation extended upward upon the abdomen, around upon the buttock and back, but not down upon the legs. In the first case mentioned, the child had been previously healthy; there had been no injury.

PUERPERAL FEVER; THE VAGINAL AND UTERINE DOUCHE.—Dr. J. W. MOLANE mentioned a case of erysipelas in the newly born child, and puerperal septicæmia in the mother, as follows: The patient was confined Friday a week ago with her fourth child. The former labors had not been difficult, although at the first the perinæum was considerably torn. The last child was large, weighing very nearly twelve pounds, and was extracted, after some difficulty, with the forceps. A slight wound was made near the brow, from which erysipelas developed, and spread to a trifling extent upon the head and neck. The temperature did not rise above 101° F. No medication was employed. The nurse at first had passed back and forth from the sick mother to the child, and the disease had probably found its origin therefrom. On the third day, the temperature in the mean time having been normal, the mother complained of slight chilly sensations, but there was no marked chill. The temperature rose to about 102.5° F., and by evening was a degree higher. On the morning of the fourth day the temperature was 104° F., and at evening 105°. There was no pain over any part of the body. There was rapid distension of the intestines, such as was seen in septicæmia involving the lymphatics, and a number of semi-liquid stools took place. When the temperature had risen to 105°, the

uterus was washed out with two quarts of tepid carbolic-acid water, about one and a half per cent. The temperature did not fall, but remained at 105° the next morning. Believing that septic matter was being absorbed from the vagina, he now washed that out carefully also, after washing out the uterus. The temperature then fell gradually, and had not been higher than 99° for two days past. There was a slight wound of the vagina, and of the perinæum. The bowels had not moved for twenty-four hours, and the distension had gradually disappeared. It would appear from this case that it was by no means always necessary to wash out the uterus in a case of rise of temperature after confinement. He had known the seat of absorption of septic matter in several cases to be not the uterus but the vagina, as was proved by the fact that washing out the vagina alone was attended by a fall of temperature. Nor was it necessary in such cases, the lochia being pure, to wash out the uterus. It was only necessary to neutralize or disinfect the foul discharge at the point where the lesion existed. The diagnosis of the origin of the foul discharge could be made by first washing out the vagina and afterward examining the discharge from the cervix. He had often found that when the nurse applied the douche the fornix of the vagina was not thoroughly cleansed. He had observed another fact in cases of puerperal septicaemia from the absorption of septic matter from the vagina: viz., that quinine, even in forty-grain doses, failed to lower the temperature without the employment of the douche at the same time. These cases pursued a much slower course than those in which the seat of absorption was within the uterine cavity, the explanation probably being a difference of relationship of the lymphatics. An important advantage in washing out the uterus in cases where it was flabby and not properly contracted was, that it immediately began to shrink, and it would be found that after the second or third time of using the douche a tube of only small size could be introduced into the cavity. He did not believe that any particular danger attended the use of the douche with the large tube. He, however, used only the fountain syringe.

Dr. WALKER had often noticed a slight rise of the temperature immediately after making the uterine injection, and then a fall.

Dr. McLANE had observed the same fact, and had attributed it to slight shock. He further remarked that the results attending the use of the douche in lying-in hospitals were by no means so uniformly good as in private practice. It was his custom to wash out the vagina with the carbolic solution in every case for a few days after labor. The question of weight of the newly born infant having arisen, he said that the largest perfectly formed child at birth which he had extracted weighed fourteen pounds and a quarter. He had once extracted an anencephalous monster that weighed eighteen pounds. The birth of large children was not always difficult or attended by special danger to the mother; if the parturient canal were large, labor might be comparatively easy.

Dr. WALKER once induced labor in a case in which the child proved to have anasarca and ascites, and weighed eighteen pounds after considerable drainage of fluid from the cord. It was born dead.

OCCIPITO-POSTERIOR POSITIONS.—Dr. McLANE asked Dr. Cook whether the rule as stated in the text-books had been confirmed in his practice—viz., that occipito-posterior positions of the head usually terminated in the occipito-anterior. It had not been in his.

Dr. Cook and Dr. WALKER replied in the affirmative. They agreed with Dr. McLANE, however, that when the occiput passed over the perinæum it almost invariably caused injury, even if the head was small.

Miscellany.

THERAPEUTICAL NOTES.—*Intra-venous Injection of Bilin as a Remedy for Cholera.*—Henry Cumberland Taylor, L. R. C. P., M. R. C. S., Jersey, England ("British Medical Journal," July 14, 1883), proposes, from theoretical considerations, the intra-venous injection of bilin as a remedy for cholera. He reasons as follows: Post mortem examinations show the liver and gall-bladder distended with bile—a condition which may be explained from the inflammatory state of the intestinal mucous membrane that both prevents the bile from entering the intestine and renders impossible any absorption of bilin from the intestine, even were bile to make its way from the gall-bladder into the bowel. This state of things therefore operates practically to lock up all the biliary elements of the entire body in the liver and gall-bladder, accounting for the engorgement of these viscera as seen post-mortem, for the absence of bile from the vomit and stools during life and from the intestine as seen after death; for the decomposition of the contents of the intestines; and probably for the thick, clotted condition of the blood before and after death. The obvious theoretical indication for treatment is to restore bile to the blood. But it would be useless to give bile by the mouth or rectum, for the intestine could not absorb it. Moreover, bile itself injected into a systemic vessel causes immediate death. However, bilin, the substance returned from the intestine into the blood by the natural processes, could probably be injected into the veins without danger, except from the introduction of air. Bilin may be prepared from ox-bile, thus: Add ether to extract the fatty matter; separate the latter by decantation; treat the residue with acetate of lead, which will form the tauro-cholate of lead; separate by filtration; suspend the precipitate in water and pass through it sulphuretted-hydrogen gas, which will form a precipitate of sulphide of lead, and leave the bilin (tauro-cholic acid) in solution; separate by filtration; to the bilin, in solution, add carbonate of sodium, which will form tauro-cholate of sodium, the best preparation for injection. This salt should be purified by crystallization. The proper amount to be injected in twenty-four hours is one hundred grammes [28 drachms], this corresponding to the quantity of bile secreted by the liver in the same time. The hundred grammes of tauro-cholate of sodium should be dissolved in one litre [2.1 pints] of water at the temperature of the body. Dr. Taylor submits that the form of treatment here proposed could not be less successful than the various plans which have been followed hitherto and with such eminently unsatisfactory results.

Veratrine as a Remedy for Tremor.—M. Fériss, of Brest ("Progrès médical," July 14, 1883), has come to the conclusion that veratrine will control the tremor of alcoholism, of various nervous affections, and of the state following pyrexia. It is to be given in half-milligramme pills, four of which should be taken daily. The action is apparent almost immediately after the first doses are taken. If the remedy is continued for a sufficient length of time, its influence remains for a long period after the use of the drug is suspended. This persistence has been observed for almost two months. The treatment should be continued at least ten days in order to produce permanent results.

M. Dubois ("Gazette hebdomadaire de médecine et de chirurgie," July 27, 1883), in reviewing the conclusions of M. Fériss, observes that most of the active principles, administered during the state of alcoholic intoxication, from the time the tremor is of the greatest intensity (the patient having abruptly stopped the alcohol), will act like veratrine to check the tremor.

Amorphous Quassin.—M. Pierre Vigier ("Gazette hebdomadaire de médecine et de chirurgie," July 27, 1883) calls attention to the amorphous quassin which the market now affords. He believes it to be preferable to crystallized quassin, while it is also less expensive. Amorphous quassin may be conveniently administered in pill form, thus: $\mathfrak{R}$ Quassin amorph., 2 grammes; excipientis, 9.1 grammes. M., div. in pil. no. C. Sig. Two to three each day.

Subnitrate of Bismuth as a Remedy for Profuse and Fœtid Perspiration of the Feet.—M. Vieusse, Surgeon-Major, military hospital of Oran ("Gazette hebdomadaire de médecine et de chirurgie," July 27, 1883), advocates the use of subnitrate of bismuth locally in the treatment of

profuse and fœtid perspiration of the feet. In an experience of fourteen years he has met with but one case that was not fully amenable to this treatment. It is adapted to all the forms, or rather degrees of severity in which this comparatively trivial, but nevertheless annoying and disgusting affliction is encountered. Five to seven drachms of the powder should be rubbed daily into the feet, not neglecting the surface between the toes. From five to fifteen days usually suffice to effect a permanent cure. There is no reason to fear that the checking of the perspiration will be followed by the establishment of some compensatory trouble, as has been alleged by certain writers. M. Vieusse attributes to the bismuth a purely local action. Under the action of the sulphydric acid of the perspiration "the bismuth loses part of its base, and, becoming acid, it exercises an astringent and slightly caustic action upon the skin." In consequence, the epidermis becomes stronger and firmer, and separates with less facility from the subjacent derma. The better tone thus imparted to the skin tends to lessen the amount of blood circulating therein, and this, in turn, diminishes the secretion of the sudoriparous glands and the sebaceous follicles. At the same time, the derma, protected by a thicker and more resistant covering, does not become denuded, and, therefore, the pain due to such denudation ceases.

M. Vieusse cites one case in which the suppression of the sweating was but temporary. However, even in this case the offensive odor and the pain were permanently stopped.

Cold Baths in Typhoid Fever.—M. Dumontpallier ("Progrès médical," August 4, 1888) expresses his belief that cold baths employed according to the method of Brand are of the greatest service in typhoid fever. His observations indicate that the systematic employment of this method not only does not cause visceral congestion, but relieves such congestion if it be present. Intestinal hæmorrhage is not a contra-indication to the use of the cold baths.

IRON AND ARSENIC IN ANÆMIA AND CHLOROSIS.—Dr. Frederick Willcocks, Assistant Physician to Charing Cross Hospital, London, in concluding an interesting article on some points in the pathology of anæmia, and on the action of iron and arsenic, remarks that, in severe anæmia, either the power of corpuscle formation is almost entirely abolished, or the young corpuscles, if formed, have little or no power to absorb hæmoglobin, and, consequently, do not reach their full development. The comparatively large size which the hæmatoblasts attain, without the absorption of any appreciable quantity of coloring matter, would go far to show that the embryonic corpuscles are more or less abortive. Iron in these cases is useless beyond a certain point, the existing corpuscles being already overcharged with hæmoglobin. These facts forcibly bear out the hypothesis as to the probable hæmatinic action of iron—viz., that it possesses no power of directly stimulating the formation of new corpuscles by any influence on the cytogenic organs, but that it improves the hæmoglobin richness of already existing corpuscles which are added to the blood by the normal processes, and, consequently, by improving their physiological value and vitality it indirectly increases their number. Therefore, where the natural power of sanguification is greatly reduced, or almost abolished, iron has little or no beneficial effect, since either very few new forms are produced, or, even if they are added to the blood, they have little or no capacity to absorb hæmoglobin and to develop into adult corpuscles.

Chlorosis is in striking contrast to the most severe forms of anæmia, both as regards its blood lesion and in its response to iron treatment. In chlorosis the supply of young, feebly colored corpuscles is abundant, and the number of red discs to the cubic millimetre may fall in many cases but slightly below normal. The average hæmoglobin richness of the corpuscle is greatly reduced, and the curative effect of iron is very rapid. A low average hæmoglobin value in the corpuscle is not, however, peculiar to chlorosis, but is present in the large majority of anæmic cases from all causes. It indicates that feebly colored or young elements are being continually added to the blood, or, in other words, that the normal process of globule regeneration is active, the numerical rise preceding the rise in the physiological value of the elements. It is in these cases that iron is indicated. Arsenic was given in two cases of chlorosis, but it had no influence either in preventing relapse on the cessation of iron, or in improving the num-

ber or value of the red corpuscles. On the other hand, in the most intense forms of anæmia, with great diminution in the number of the corpuscles and a high relative hæmoglobin value, iron is practically useless, or even harmful, while arsenic may produce a considerable rise in the number of the corpuscles, as well as great improvement in the general symptoms.

REMOVAL OF A "CAVERNOUS ANGIOMA" OF THE TONGUE.—In the August number of the "Practitioner" Mr. Henry W. Freeman relates a case of this sort, and adds the following remarks:

"Mr. Morratt Baker's method of slitting the tongue through the middle from apex to base with a straight probe-pointed bistoury and cutting through half the base with the wire-rope *écraseur* when the whole of one half of the organ is involved, answers excellently well; but, seeing that more than an inch of the front of the tongue was here free from disease, we determined upon a modified procedure, the result being that the balance of the tongue was well maintained by preserving its tip with the attachments to the floor of the mouth, and articulation and swallowing were not materially interfered with.

"The lingual artery normally runs an oblique course from its origin to its termination. It is very tortuous, and has very few anastomoses, and does not enter the inferior surface of the tongue at its extreme base; and I venture to presume that—with the cheek well retracted or, if needs be you require more room, dividing the cheek horizontally from the angle of the mouth backward—you can, with a curved needle, transfix one half of the tongue in front of the foramen cæcum, and with the wire rope cut through transversely without dividing the main trunk of the lingual. The dorsal branch of this artery seems to supply the root and the circumvallate papillæ. It is well to remark here how friable the tongue-structure seems to be when cut through at a right angle to its long axis, the rope passing through when the slightest tightening was made by the *écraseur* screw. It cuts through as easily as liver.

"In order to secure a good operation, the wire rope requires to be made of the softest and most pliable material. Sir James Paget has recommended the use of strong whip-cord, and it is preferable to the stiff, unmanageable rope usually supplied with the *écraseur*. We secured from Krohne and Sesemann for this case a steel rope, finely manufactured with material of the most malleable description. It was as pliable as whip-cord, and I have recently used it with Gooch's cannula in ligaturing an intra-uterine tumor, and found it quite as manageable.

"In administering anæsthetics in excisions of the tongue it seems all-important that the anæsthesia should *not* be profound. I hold that partial insensibility is only admissible. I have seen more than one fatal case during removal of the tongue, the patient being profoundly insensible. If there be much or little bleeding, mop as much as you may, some blood trickles backward and little pools accumulate in the glosso-epiglottidean pouches and flow over into the larynx, and the epiglottis, being held erect by the drawing forward of the tongue, can not divert its course. The patient would cough up the blood if only *partially* under the anæsthetic, and this course was rigidly carried out in the present case."

THE INDIAN ORIGIN OF THE CHOLERA IN EGYPT.—Mr. Robert Lawson, Inspector-General of Hospitals, of the British army, has written a letter to the editor of the "Medical Times and Gazette," of London, in which he uses an expression (which we italicize) going to show that in his opinion the disease now raging in Egypt is genuine Asiatic cholera. Mr. Lawson says:

"While thanking you for the readiness with which you inserted my letter of July 26th in the "Medical Times and Gazette," I deem it necessary to offer the following remarks on one point in the observations you appended to it. You refer me to page 101 of the Report on the Cholera Epidemic in the United States in 1873, to show that the disease at New Orleans was not *of the type common in India, or which now rages in Egypt*, but resembled the severe diarrhœa which prevails everywhere in hot weather among insanitary surroundings; and from this you consider that not only my conclusions, but my premises, fall to the ground. Now, the disease commenced in February, and up to

the beginning of April, when the weather could not be called hot, there had been 'thirty-one cases, of which two (2) were recoveries' (Report, page 97). This does not indicate a slight form of disease, to begin with, whatever it became subsequently as the usual season for diarrhoea came on.

"Again, as to the relation in which the first cases stood to the subsequent spread of the disease, and as to its nature, I refer you to page 1 of the Report, where it is stated that in 1873 cholera prevailed throughout the valley of the Mississippi, commencing at New Orleans, from which it extended northward, and became epidemic at all points attacked. The vast majority of the medical men who were engaged in combating the disease were unanimous in pronouncing it Asiatic cholera. A second class—respectable, both numerically and intellectually—recognized the disease to have been cholera in a fatal form, but of American origin; while others regarded it as a pernicious bilious or malarial form of fever. The general consensus of opinion, then, was that the disease was a fatal form of cholera—a conclusion which few who have perused the Report carefully will be inclined to doubt.

"These facts place my premises regarding the outbreak at New Orleans beyond question, and I must leave your readers to form their own opinion as to whether my mode of treating these premises, or that you seem to recommend, is most in harmony with the modern spirit of research, or most likely to enable them to clear away the obscurity which now envelopes the mode of origin and of spread of cholera."

MOLLUSCUM CONTAGIOSUM GIGANTEUM.—Under this name, says the "Medical Times and Gazette," Dr. S. Laache, of the Anatomico-Pathological Institute of Christiania, describes, in a recent number of the "Nordiskt medicinskt Arkiv," a tumor extirpated from the nape of the neck of a female aged fifty-six. This tumor, which had lasted for thirty years, but had increased considerably for the last four years, was of the size of the fist, with nodulations or unequal protuberances on the surface; it was covered at its base with normal skin, sending tongue-like ramifications over the whole tumor, which were transformed at last into a delicate membrane, half pellicular and half granular, covering the whole mass except at the summit, where there was a flat crateriform depression. Under this incomplete covering there was the mass of the tumor, which, as it were, undulated against the surface. The cut surface, equally composed of nuclei of unequal size, separated by septa of cellular tissue, presented a granular aspect, but without the knife being covered with adipose matters. Examined by the microscope, the lobules contained, in the circumference, cellules evidently resembling epidermis, while in the center was a considerable number of corpuscles with an adipose or waxy luster strongly resembling amyloid tissue. In all other respects they resembled the corpuscles of molluscum, with which the author compared them. In his remarks on the case, Dr. Laache discusses the differential diagnosis between molluscum and epithelioma or canceroid, to which last the tumor was at first referred. From canceroid, however, the molluscum in question was distinguished by its definite form and its tendency to grow outward, besides by its being covered entirely by a kind of delicate skin without any apparent ulceration. It was, however, the presence of corpuscles of molluscum in considerable number which determined the diagnosis. The author admits, however, that, as regards prognosis, the tumor could not be regarded as being so benignant as ordinary molluscum, and he therefore thinks he ought to consider it as a transitional form between the malignant epithelial tumor and the benignant one. He observes that there was no relapse at the end of more than six months. In conclusion, Dr. Laache considers the presence of nuclei in several of the shining corpuscles as a proof in favor of the opinion that the corpuscles of molluscum are the results of a peculiar degeneration of pre-existent epidermic cellules.

THE COMMUNICABILITY OF SYPHILIS TO ANIMALS.—A recent number of the "Wiener medizinische Wochenschrift," quoted in the "Medical Times and Gazette," contains two papers on this subject. One is by Köbner, and the other by Neumann. Both investigators again arrive at the conclusion that true syphilis can not be transmitted to animals. Köbner obtained positive results with inoculations performed with

scrapings from a soft chancre on rabbits. Frequent inoculations with pus from simple and scrofulous buboes never gave any result. Köbner concludes that there is a specific contagium in the pus from a soft sore. Something more is necessary than mere contact if successful inoculations with the pus from a soft chancre are to be made. There must be a wound; and the deeper this goes, the greater the certainty of a successful result. Experiments were chiefly performed on the conjunctival sac of rabbits. Klebs, Aufrecht, Bireh-Hirschfeld, and Morison have found bacilli in syphilitic new growths, but Köbner has to confess that, in spite of trials with all the new methods of staining, he has been unable to find the bacilli in excised papules of the skin and indurations where the surface was quite unbroken.

THE AMERICAN PUBLIC HEALTH ASSOCIATION will hold its eleventh annual meeting in Detroit, beginning November 16th.

THE PENNSYLVANIA STATE VETERINARY ASSOCIATION was lately organized in Philadelphia.

QUAIN'S DICTIONARY OF MEDICINE, published by Messrs. Longmans & Co., must take rank among the most remarkable of successes in modern medical literature. The sale has already reached seven thousand in this country, and a large issue has been sold in America.—*British Med. Jour.*

EULOPHIA GRACILIS IN THE TREATMENT OF CHYLURIA.—In a recent report to the Surgeon-General of the Navy, Passed Assistant Surgeon F. B. Stephenson states that the *Eulophia gracilis*, an orchid found in the United States of Colombia, is the best remedy known for chyluria.

ARMY INTELLIGENCE.—*Official List of Changes of Officers serving in the Medical Department of the United States Army from August 18, 1883, to August 25, 1883.*—MIDDLETON, J. V. D., Major and Surgeon. Relieved from duty at Fort Hayes, Kansas, and assigned to duty at Fort Leavenworth, Kansas. Par. 2, S. O. 169, Department of the Missouri, August 18, 1883. — WILLIAMS, JOHN W., Major and Surgeon. Granted leave of absence for one month, on surgeon's certificate of disability. Par. 1, S. O. 109, Department of the Columbia, August 8, 1883. — BARTHOLF, JOHN H., Captain and Assistant Surgeon. Assigned to temporary duty at Vancouver Barracks, Washington Territory. Par. 2, S. O. 109, Department of the Columbia, August 8, 1883. — FINLEY, J. A., Captain and Assistant Surgeon. Relieved from duty at Fort Concho, Texas, and assigned to duty at Fort Stockton, Texas, as post surgeon. Par. 1, S. O. 101, Department of Texas, August 16, 1883. — KIMBALL, JAMES P., Captain and Assistant Surgeon. Relieved from duty in Department of the Platte and to proceed to New York City and report in person to the President of the Army Medical Examining Board for duty as a member of that board, vice Surgeon Clements, relieved. Par. 11, S. O. 193, A. G. O., August 22, 1883. — CLEMENTS, BENNETT A., Major and Surgeon. Relieved from duty with the Army Medical Examining Board, New York City, N. Y. Par. 11, S. O. 193, A. G. O., August 22, 1883.

NAVAL INTELLIGENCE.—*Official List of Changes in the Medical Corps of the Navy during the week ending August 25, 1883.*—Assistant Surgeon A. A. Austin, ordered to Naval Hospital, New York. — Assistant Surgeon T. C. Craig, detached from Naval Hospital, New York, and ordered to the United States steamer Minnesota. — Passed Assistant Surgeon M. H. Crawford, detached from the United States steamer Pinta and placed on sick leave. — Passed Assistant Surgeon W. G. G. Willson, detached from the Minnesota and ordered to the Pinta. — Surgeon Charles H. White ordered to the Museum of Hygiene, Washington, D. C. — Passed Assistant Surgeon J. H. Bryan, detached from the Museum of Hygiene, and ordered to the Miantonomoh. — Passed Assistant Surgeon D. M. Guiteras, ordered to the Navy Yard, Pensacola, Fla.

SOCIETY MEETINGS FOR THE COMING WEEK.—*Monday, September 3d:* Medico-Chirurgical Society of German Physicians; Morrisania Medical Society (private). *Tuesday, September 4th:* Medical Society of the County of Hudson, N. J.; Virginia State Medical Society (Rock bridge Alum Springs—first day). *Wednesday, September 5th:* Medico-Legal Society; Virginia State Medical Society (second day). *Thursday, September 6th:* Virginia State Medical Society (third day).

Lectures and Addresses.

CLINICAL LECTURES ON DISEASES OF THE SKIN.

DELIVERED AT THE NEW YORK HOSPITAL,

By L. DUNCAN BULKLEY, M. D.,

PHYSICIAN TO THE OUT-PATIENT DEPARTMENT—CLASS OF VENEREAL AND
SKIN DISEASES.

LECTURE II.

Squamous Syphilide simulating Psoriasis.—Tubercular Syphilide resembling Lupus.—Tubercular Syphilide.—Favus.

CASE I. SQUAMOUS SYPHILIDE SIMULATING PSORIASIS.

—GENTLEMEN: I first present you to-day the case of a man thirty-three years old, peculiarly interesting as coming after the case of psoriasis which I showed you last week. I mentioned that the only eruption which that particular case could resemble was the small papular syphilide, and I called attention to certain features of psoriasis which I said did not exist in the former disease; in the papular syphilide you will see lesions which you do not find duplicated in psoriasis; and I think I can point out many elements and features which will enable us to make a complete and clear diagnosis, without asking him anything as to the history. You see it does not resemble very much the case of psoriasis; for instance, the lesions are grouped together quite differently. You may see a large papular syphilide like a large spot of psoriasis scattered over the body, and if you examine all of the eruption on the body you will find some of the lesions grouped together, from which you are enabled to make a diagnosis.

In this patient you find scaling, but the scales are white, less adherent, and not branny. This is a simple crust, and I can pull it off with the greatest ease. Another point is that when the crust is removed you do not find the bleeding corium beneath, and it is well worth remembering. He has had this eruption on the body and limbs for five months. On the lower limbs you see what one might say, if seen alone, was psoriasis. If that was presented to me from the knees down, and nothing else, I confess I could hardly make a diagnosis. If a man refused to show me anything but that, or if I did not examine close enough to find anything but that, I might say it was psoriasis. You find the moist scales heaped up, and you pick the mass off, and reveal the bleeding of psoriasis, and this scale is adherent. The difference between these scales and those of psoriasis is, that these are thickened and filled with a deposit. A feature of the syphilitic eruption is found in its situation in the bend of the elbow. Here we find it in the prominent position of psoriasis, namely, on the extensor aspect of the arm, just above the elbow. I never speak of syphilitic psoriasis. Psoriasis is a distinct disease. We do not meet with a psoriasis due to syphilis, or a lupus due to syphilis; but we do meet with a tubercular syphilide. After this eruption has disappeared you will see a stain left.

CASE II. TUBERCULAR SYPHILIDE RESEMBLING LUPUS.

—This patient is a man, aged thirty-three, married, a sales-

man, sent here by Dr. Raphael. His children are healthy, and he enjoyed good health till about ten years ago, when he first noticed some spots that appeared on his face and body, which were pronounced specific. Previous to that he had a crack or fissure of the upper lip which would not heal. He was treated for syphilis, but he felt convinced that the physician was wrong in his diagnosis, as he had never exposed himself, and never had had any sore on his genitals. The physician gave him mercury and iodide of potassium, which produced on his forehead just such sores as he now has on his lip. He was under treatment for six months without any benefit. He was next treated by a homœopath; he had a sore on his leg which healed up, but that on his forehead would not heal. He next took arsenic, and had escharotics applied to the sore on the forehead, with no result. He discontinued the use of caustics, but took medicine internally. Seventeen months ago an angry red spot appeared at about an inch above the angle of the mouth, on the right side. This sore appeared soon after using Wei de Meyer's snuff for a catarrh of the nose. It went on to ulceration and suppuration of the nose and lip, that on his forehead healing up about that time. For the past ten months he has been treated by various remedies, and six months ago his face was almost entirely healed. But about that time he had an attack of erysipelas of the face, scalp, ears, and eyelids, from which he got well, and after that the sore was healed, all but a minute spot, which looked very much like an obstructed sebaceous follicle, and from that the sore spread again and continued to grow worse till it assumed its present condition.

Whether this is a case of chancre of the lip I can not tell; he says he has never exposed himself, and you see these cases occasionally where you can get no symptom of chancre except that the sore will not heal. A scar of the diameter of the one on his leg, without varicose veins, upon the upper third of the leg, pigmented and soft, is in a good many instances syphilitic; I mean, you can take that always as a grain weighing in the balance. Look closely, and notice the great amount of inflammatory induration associated with and surrounding the outer edge of this sore, and notice that there are no elements which we can call tubercles, such as we see in lupus—namely, soft, pulsatious things that have a branny scale, and break down in inflammatory ulceration. The suppleness of this scar—a decided scar that will remain for life—is characteristic. Notice the inflammatory elements of the ulceration, and its slow, lymphatic character. Now, the question of diagnosis arises between syphilis and lupus. In the first place, he has not had any specific treatment for four months, and the eruption has resumed the condition which it had before, which favors the belief that it is specific. Suppose he had not had this specific treatment, suppose he was a foreigner and could not tell what he had done, or you saw him for the first time, could you make a diagnosis from the appearance alone? I hold that you could. There are elements here that are not seen elsewhere. In the first place, lupus is extremely rare indeed in this country. In looking over some statistics, I find in the out-patient practice over ten per cent. of all the

cases were specific, while in private practice there were only five per cent.; that was astonishing to me, and it was astonishing to me when I got the figures to find how few cases there were of lupus. In about 8,000 patients there are only about 42 in the list. I have seen these syphilides burned out by caustics, nitrate of silver, etc., and cured for the time being. They will heal if you excite sufficient inflammatory action, but they will be sure to break out again, as in this instance.

Secondly, you do not have any inflammatory edge. In lupus you find more or fewer tubercular nodules.

CASE III. TUBERCULAR SYPHILIS.—I want to show you now a patient that Dr. Allen sent here with almost precisely the same physical features a week or two ago, vastly modified to-day by treatment—that of a man, aged forty-two. Two weeks ago this lesion you see on the lips resembled exactly what you saw in the last case, but is now modified by the treatment he has received. You see how quickly the inflammatory action subsided under proper treatment. A better illustration could not have been found for clinical demonstration of two cases so closely resembling each other as these did two weeks ago. There was some little doubt in the diagnosis of this case, and the patient was put on active specific treatment, with the result you see. Within three weeks or a month that induration will be entirely gone, leaving nothing but little red stains and a scar.

CASE IV. FAVUS.—This man I show you first exhibits favus, most characteristically, in a way that you could not mistake. He came from Hungary, and was admitted two months ago, during my absence from town. He has been in this country nine months; has a sister, twenty-three years old, who has no eruption; his brother in Austria had it for several years, and is now well. He is now nineteen years old, and his brother is some years older, and had the eruption some time, but has been cured, according to his account.

The characteristic lesion of favus is a yellow cupped crust formed upon the scalp or elsewhere, which is soft and friable, and comes off easily. You will see these yellow cups standing on a yellow base, and there are cases where there is cicatricial tissue, with all the hair gone from it.

What the condition was when this man came here I do not know, but it was put down as eczema of the scalp. He had been applying ointments and had been under various treatment, and there is no blame for the wrong diagnosis, because the diagnosis of favus can not be made without treatment. I can treat this patient, and a week from now no one could make a correct diagnosis. When the hair is growing well, it is difficult to recognize the favus. When I came back some of the cups were springing up, and the diagnosis was very easy to me, but had been very difficult to my assistant in my absence; but the eruption is better to-day than it has been. The only way to make the diagnosis, when you can not make the proper examination, is to leave it alone for a sufficient time to have the cups formed.

What you see here under the microscope are a number of small tubes of uniform size, and of a slightly greenish tint, with rounded extremities. The products of *Tinea*

trichophytina are smaller than these, and those of *Microsporon furfur* are smaller yet.

How are the crusts of favus prepared for the microscope? In the simplest manner possible. The material that you take wants to be laid on a slide and moistened; water will do perfectly well, although I prefer two parts of glycerin to one part of liquor potassæ. Taking your knife and breaking it up, you will see the whole field covered with spores. Any one of these spores is enough to propagate the disease. You may see hundreds and thousands in the field, and you see how difficult it must be to get rid of all of them.

CASE V. FAVUS (Case No. 2).—There is very much more difficulty in diagnosis in this woman's case. I question if any of the gentlemen would be at all able to make the diagnosis. It was supposed to be eczema; there were certain portions of the scalp slightly scarred, which we know does not come from eczema, psoriasis, or seborrhœa, from which you never observe a scar. I have left her three weeks without local treatment, although I have given her rhubarb, etc. It was only by waiting several weeks for the growth that we could make our diagnosis; but here to-day I make my diagnosis. I make it from the hairs, and to show the difficulty in this case I will state that two of my assistants searched the hair and thought it was not favus, and I searched the hair and found none, but on the second search that I made I found two hairs that were affected by favus. After several examinations by persons accustomed to it, it was not found until to-day, when I searched for it in my office. The disease is quite common in Austria and Hungary, and in Glasgow, but it is particularly rare here. Now, you get through here a slight amount of crusting, and then here is a slight amount of scarred baldness, and you look in vain for any open hair follicles; you see simply scarred tissue. This is important in these milder cases, and they go on for years, but with proper treatment they could be cured. Here, gentlemen, you see a sulphur-yellowness of this one little cup. There is a peculiar smell when there is enough of the disease, but not when it is very slight. There is a trifling change of color in the hair; one portion you see is moist, and another portion you find dry and harsh, and that attracted my attention.

As I said, we can improve the nutrition very much; but here is a curious thing: that almost all people who have favus, if they are cured of their favus, or if the disease is largely removed, their general health is improved without treatment; in other words, the growth acts as a depressant itself.

What is the local treatment? Some years ago Bennett offered to cure these cases of favus with cod-liver oil, and it was a wonderful failure. For a time there was great talk of Bennett's treatment of favus, and he exhibited a number of patients who were said to be cured, but after a short time those patients turned up at other clinics. He thought they were cured because the surface cleaned off and the hair was growing. They were not cured. If I had this patient here in the hospital a month, and good attendants should see him every day, he could not be cured in three years perhaps, not in six perhaps, certainly not in a year, because of

the character of the disease, for the parasite burrows into every individual hair follicle to its extreme depth, and produces ulceration and destruction of the follicles. To cure it, every hair must be pulled out. If you shave off the hair and apply an ointment, and if the patient does not die in the mean time, you may possibly cure it, but I do not think the mere application of ointments will cure it in a lifetime. To really destroy the parasites you must penetrate the sheaths of the hair, and therefore you must pull every hair out. This treatment then may be followed as a wholesale depilation, by tearing off the whole at once with a stick made of wax and tar, which is made to adhere to the hairs and then pulled off. If you pull them out with the forceps, one at a time, you will be surprised to see how many hairs the human scalp contains; while on the other hand, if you pull them out with a stick, you pull out hundreds at a time. The hairs come out very easily, and when they come out they are laden with the parasite.

Original Communications.

AN OPEN LETTER TO COUNTY MEDICAL SOCIETIES

IN THE STATE OF NEW YORK.

By SAMUEL S. WALLIAN, A. M., M. D.,
BLOOMINGDALE, N. Y.

As a member of two county organizations, familiar with the trend of recent discussions (both secular and professional) of the code question, and aware that a large number of county societies have declared against the existing State code and in favor of the Code of the American Medical Association, I desire to suggest a few practical points which will sooner or later present themselves for consideration and settlement. As medical men we demean ourselves by approaching this touchy subject of the code in a spirit of partisanship or prejudice, but should discuss it with the same poise and candor with which we would analyze a case in diagnosis. Unfortunately, there are too many who are so blinded by partisan zeal as to resist every appeal to reason and who will go on to the end (of life, perhaps) asserting allegiance to a code—new or old—the spirit of which they have never fully understood, and the letter of which they have *scarcely* honored.

It ought not to be necessary to remind members of the legal origin and prerogatives of their societies, but an apparent obtuseness on this point seems to be the primary block of stumbling.

The act of 1806 duly incorporated the Medical Society of the State of New York, and authorized the formation of the several county societies as auxiliaries. The prime and sole condition on which depend all chartered rights is the enactment of by-laws, rules, and regulations (code) for their own government, which "shall not be repugnant to the Constitution of the United States or of the State of New York, or *inconsistent with the by-laws, rules, and regulations (code) of the Medical Society of the State of New York.*"

Whenever a county society enacts a set of regulations (code) "inconsistent" with the regulations (code) of the State society, it simply and from that moment *ceases to have any legal existence*. It becomes, to use a political term, a rebel and seceder. Granted that the regulations (code) of the State society, through the tinkering of schemers and would-be reformers, have been made obnoxious to a large number of the constituency of county organizations, *secession is not the method of cure*. It is contrary to the spirit of a democracy, and contrary to common sense. On the other hand, this illogical course only *confirms and perpetuates the bad legislation* indulged in by the parent society. This principle is too thoroughly established and too generally acknowledged to require any formal corroboration.

Taking the action of the Essex County Society as a sample of what others have done, a majority of 6 to 1 (18 to 3) declared by resolution, at their annual meeting in June last, that they *repudiated the existing code of the State society*, and reaffirmed allegiance to the code of the American Medical Association.

Hence, since the 26th day of June, 1883, the Essex County Medical Society has had no legal existence.

True, this question of loyalty was not broached at the last meeting of the State society, but, after the acrid, and, in some instances, unseemly and indecorous agitations of the subject which have occurred in certain quarters, it can not be expected that the champions of either side will hereafter waive any of their legal or chartered privileges, but will hold every auxiliary society to a *strict allegiance to the letter and spirit of the law*.

It is folly to hoodwink ourselves on this point. The law is by no means ambiguous, and *no rendering of the English language can give it any other construction*.

If any modification of the existing and, to many, obnoxious State code is to be made at the next annual meeting, it must be done by the votes of *permanent members* and of the *delegates of such county societies as have adopted a set of regulations (code) not inconsistent with the regulations (code) now governing the State society*; in other words, not inconsistent with the so-called "new code." The code of the American Medical Association is "inconsistent," etc.; hence, Essex County, in her present dilemma, and all other county societies which have taken similar action, can have no voice or vote in either confirming, amending, or abrogating the obnoxious code.

Delegates from societies which have committed themselves to this unparliamentary and undemocratic course must, of necessity, be refused recognition—it is to be hoped not in any such spirit of discourtesy as was displayed at St. Paul last season!

It can not be expected that the spirit of deference shown by the advocates of the new code at the last session, in not insisting on strict loyalty on the part of county societies, will prevail during another session. Too much feeling has been aroused; all weapons will be used and every legal advantage availed of.

Have country members, who have unthinkingly—perhaps only instinctively—thus committed themselves to virtual secession, really looked this question in the face, and

are they ready to be thus summarily disfranchised, as regards participation in the proceedings of the State society?

There is no need of consulting the courts. The law is so plain that a wayfaring man though a doctor, even, need not err therein. The average school-boy can expound it without fear of tripping.

There can be but one remedy, and that lies through a manly reconsideration of the unwise and ill-considered acts of secession—for such they surely are—and a simple declaration *acknowledging the existing State code*. Then, if thought best, a further resolution may set forth critical objections to any obnoxious features of the existing code, and instruct the delegate to use every endeavor to bring about desired changes. This is the only rational, honorable, and democratic method of correcting legislative evils.

What would be the spectacle of a board of county supervisors "repudiating" the acts of the last session of the State Legislature, and enacting laws more congenial to their wants or feelings? Stupid as such action would appear, it is not a whit more absurd than is the recent action of certain county medical societies.

Should the recalcitrant or seceding counties refuse or neglect to adopt this eminently proper, rational, and honorable course—the only course by which to recover what they have now unquestionably lost, viz., *representation in the State society*—there is but one alternative open to "loyal" members of county organizations, if they desire to be represented at the next annual meeting of the State society. They must call a meeting of those who hold to democratic and legitimate methods of settling ethical disagreements, organize county medical societies *de novo* in their respective counties, enact a code of ethics "not inconsistent," etc., elect a new delegate and send him to Albany with formal credentials, where he must necessarily be recognized, to the exclusion of any who may base claims on credentials issued by the old and (legally) dead societies.

Gentlemen of the county medical societies, are you ready for the question? To which horn of this dilemma are you inclined to fasten?

Members of the Essex County Medical Society, will you right yourselves and be represented at Albany by your old (and *tried*) delegate, or by one of the "lonesome three" who refused to secede? In other words, having voted to commit *felo-de-se*, will you insist on dying, or will you, as handsomely as may be, recover yourselves while the way is yet open?

THE PATHOLOGY OF ACUTE LOBAR PNEUMONIA

FROM A NEW STANDPOINT.

By WILLIAM D. SCHUYLER, M. D.

(Concluded from page 235.)

Third. If further argument were necessary, it might, with equal reason, be drawn from the results of the process upon circulation. We should ask how depuration of the poisoned blood is promoted in and by the lungs by its obstruction in those organs? We know the blood is obstructed by the pneumonic process because of the induced

arterial anæmia which results on the one side, and the hyperæmic condition of the veins or afferent vessels resulting on the other. In other organs increased function is caused and sustained by an increased rapidity of circulation through them; which is not the case for the lungs in this malady. Although these organs are hyperæmic in the stage of engorgement, in the area where the process is forming, and in collateral areas throughout until crisis or advanced resolution occurs, yet this hyperæmic condition differs markedly and in two particulars from that congestion which promotes functional action: First, it is a passive, fluxionary congestion, rather a simple hyperæmia; while the congestion which increases function is determinative or active. Second, this is a hyperæmia of carbonic blood, which excites respiration only, and does not stimulate but depresses other functional activities, while an increase of general function action depends upon a determination of arterialized blood. These organs, then, being obstructed, blocked with blood, instead of being in condition to circulate it more rapidly than otherwise, can not be held to exercise in this state a blood-purifying action.

Fourth. How can it be maintained that by this process the entire volume of the blood is depurated of a poison through an exudation which immediately solidifies or consolidates the pulmonary area into which it is poured, and completely inhibits its further functional capacity; how, by this action, can the remainder of the blood not involved become cleansed?

As the blood leaves the right ventricle, and enters the pulmonary artery, its character must be even throughout. No selective process which has determined a contained poison to one fraction of the systemic stream can have taken place before this fluid reached the right heart; and certainly none can act while it is in this organ, or while it is further passing the two inches comprising the length of the pulmonary artery. Hence, as the blood divides and enters the right and left pulmonary arteries, the composition of the two streams must be the same. And, if one division has the potency to create local trouble for eliminative purposes, the character of the other division should be equally potent to set up a like action; which affords an especial reason for deciding that, if a depurative action causes the local process in this disease, it should occur in both lungs and by many foci, and not as a concrete or partial condition, as is developed.

But the point I desire to make in this place is, that, as only a portion of the blood even in many circulations can evacuate its poison in this confined exudate; and as it is doubtful whether there is a further circulation through the area which becomes consolidated after the primary stoppage, this supposed blood-purifying process is a failure. It is more reasonable to suppose that an elimination is not intended.

For the various reasons given, I submit that the local affection is not depurative in character, and, if not, it follows that it is not a manifestation of an infectious disease. The likeness of the malady to the essential pyrexia is, therefore, not established, and the hypothesis that acute lobar pneumonia is essentially an infectious fever fails also.

There is one point more to be considered against the pyrexial hypothesis, which is, that fever is an irregular and inconstant manifestation in the process. It is a familiar observation that there is a want of established correspondence between the extent of the local lesion and constitutional symptoms, or fever. In some cases the pyrexial phenomenon is very marked, in others, on the contrary, it is a feeble manifestation, and, in others still, there may be a lack of fever throughout.

While the data in regard to the latter fact are not numerous, yet there exists sufficient evidence upon which to establish its possibility. While I have met with many cases in which the maximum of fever did not reach above 100° or 101° F., I have attended one well-marked case of the disease, seen on the second day of the attack, and while consolidation was yet forming, in which the thermometer, carefully placed and well protected in the axilla, did not register above 97° until after three days of tonic stimulating treatment, which increased the temperature to normal. This case occurred in a German, single, aged twenty-four, a grocer's clerk, whose living had been irregular, and who, insufficiently clad during the preceding winter months, had been subject to daily early morning exposure in the market. He stated that he had not been strong for some weeks prior to his attack; he denied having had a chill, or having experienced thirst or heat. His symptoms were weakness or great debility, loss of appetite, rusty sputa, slight in amount, and scanty urine.

In regard to apyrexial cases, Wilson Fox says such must be exceedingly rare. Yet, as not wholly denying but granting their possibility, he gives the statement of Grisolle that "in some cases the course of pneumonia is apyrexial throughout, though the physical signs and rusty sputa are present; and of Wunderlich, who repeats or justifies Grisolle's statement.

Juergensen says, in regard to this point: "I do not wish to deny that, in a highly cachectic person who is attacked with pneumonia, the temperature of the body may possibly remain normal. And, the 'walking cases' referred to by Flint without doubt belong to and illustrate this class. At any rate, the lack of a more pronounced febrile expression in a large proportion of cases is to my mind conclusive that fever is not the essential pathological factor in the genesis of this malady."

Although the temperature curve exhibits characteristic features, which may give it a seemingly essential importance, yet I hold that the expression is irritative simply, and that its distinct characters are to be explained by the development of an equally characteristic cause, the local pulmonary anatomical process, which is essentially the disease. The fever manifested is without doubt an expression of the irritation which the formation of this process sets up in the system of the person attacked, and its degree depends wholly upon idiosyncrasy, temperament, and existing vital conditions.

It is upon this ground that we can explain the comparative apyrexia of the cachectic and physically depraved, on the one hand, which, in certain degrees, may be observed in daily experience; and the high grade of fever which attends the process in the young and otherwise robust, or nerv-

ously excitable subject, upon the other. And I may mention here that, in my opinion, this variation of grade of fever dependent upon tonic, sthenic conditions, as it occurs in pneumonia, constitutes a point of difference between it and those pyrexiae which are essential. In the latter, as a rule, the higher grades of fever are developed in the more depraved subjects.

It is upon the ground of idiopathic states also that we are able to explain the want of a general relation between the local and constitutional symptoms referred to especially by Juergensen.

The irritative character of the pyrexial manifestation of pneumonia is rendered probable from its inconstancy and irregular manifestation; its concurrence with the commencement and formation of the local process; its accession whenever the local process is extended; by the fact that defervescence sets in when exudation is completed and is perfect with the occurrence of crisis; also, because it has the same typical course when the pneumonic process follows after traumatism; and, lastly, because the temperature curve does not coincide with the same phenomena of the essential fevers.

If other reasons were wanting for abandoning the theory that the pyrexial manifestation of pneumonia is the essential element of the disease, they may be found in a consideration of the following questions: What purpose is served by giving to this fever the prominence which attaches to the term "essential," and according it a special name? By the designation of "febris pneumonica" is any quality of the malady elucidated which renders the important indications for treatment more clear, simple, or emphatic? On the other hand, does not such prominence act injuriously by withdrawing attention from indications of vastly more importance than those which arise in connection with the pyrexia?

In other fevers the classification illustrates to the student the main indications to be met. Can a like advantage be claimed for the special designation in this case? For "malarial" fevers we know that, with a regulation of functions, quinine and arsenic are curative; in the essential fevers, although we know there is a strong tendency to self-limitation, yet the pyrexia comprises the source of danger, and therefore its management, with an equal regard for the support of our patient, furnishes the indications to be met. In the exanthemata, more definitely limited than typhus or typhoid, fever is also the dangerous element, and of the first therapeutic importance. But this febris pneumonica! Its bearing, considered as a fever simply, upon the prognosis of the pneumonic process is a secondary matter; there is no element of danger in it; it rarely reaches 105° uncomplicated, and generally its range is from one to three degrees lower, and downward; furthermore, at a comparatively early day, from the third to the eleventh, of the disease, generally from the fifth to the seventh, it terminates naturally, being one of the phenomena of crisis. In this malady, therefore, beyond being an index of the progress of the local affection as we shall see, the febrile manifestation is of but little account, which being true clinically, why give it the dignity of an "essential"?

As we shall see, the phenomena which involve the elements of danger in this pathological process, which therefore should be watched and most carefully studied, are directly or indirectly connected with the pulmonary lesion, and have regard to two momentarily vital functions, which are imperiled by it. These are, in the earlier periods, the *respiratory* function, which, being inhibited, may result in death from apnœa; while in the later or more advanced stage the *circulatory* function involves the weak point, when death may occur on account of right cardiac insufficiency. These dangers will be more especially characterized in my study of the morbid physiology of this malady.

The important prognostic signification of the local lesion and the unimportant character of the pyrexia render, to my mind, any undue prominence which may be given to the latter questionable, if not positively harmful, teaching. Hence, on the ground of clinical importance, considered in the light of the dangers inherent in the malady, and also for the scientific reasons advanced, I must refuse to accept the hypothesis that acute lobar pneumonia is to be regarded and treated as an essential fever.

THE LOCAL PROCESS IS NOT INFLAMMATORY.—Although the grounds for maintaining that the local process in pneumonia is not an inflammation will be more manifest after a careful analytical study of the process itself, anatomically and histologically, which will be given in a following article, yet the general facts in evidence may be briefly referred to here, and summarized as follows:

THE CHARACTER OF THE PROCESS AS A WHOLE.—Its rapid development, considering the extent of the lesion, and especially considering the amount of the exudation poured forth, the nature and facts of its limitation—it does not extend as an inflammatory process to the delicate overlying pleura, or communicate a like action to the enveloped bronchial mucous membrane (though both of these structures are involved, the action set up in them, judged of by its results and transient character, is to be regarded as a passive congestion, rather than as an inflammation); the singular character of its abrupt termination, spontaneously, by pressure or with the consolidation of the lung structure involved; the mode of its extension when such occurs, not by a slowly advancing process of contiguous action, but by involving a considerable extent of pulmonary structure quite suddenly, as by a stroke; its changing character as a process of development or retrogression, and the rapidity of these two actions; its speedy early removal, and the fact that after its removal the pulmonary structures, which have been so completely involved, are found not to have been injured anatomically or functionally, except in a nutritive sense—these phenomena are most unlike those of an inflammatory process, and strongly negative the hypothesis of such an action.

The Nature of its Results—namely, of Congestion, of Exudation, and of Consolidation.—(1.) The congestion which occurs in the stage of engorgement, and constitutes the first result of the primary lesion, is special, and, I may say, has no counterpart in pathology. It is not an active event, but is a passive resulting condition, occurring on account of the pulmonary obstruction created, on the one hand, and

a local filling by the constantly arriving, inflowing blood, on the other. Unlike other forms of hyperæmia, this congestion is not the result of an irritative determination of blood to the *locus morbi*, and maintained by a rapid passage through and out of the affected part; but the vital fluid comes to the part in a natural way, and at first in normal volume, and its local increase is due simply to its passive retention. Again, in this congestion there is no rapid change and renewal of blood in the involved portion of the lung corresponding to the renewal of this fluid in other parts or organs affected by inflammation; but, instead, there is a local stagnation of blood, which fluid is changed only in amount by addition from natural physiological causes. The blood that arrives first remains, or, if it passes through into the efferent vessels, does so very slowly. And this fact of the non-renewal of the blood which furnishes the exudate, or its renewal being by addition only, I have already pointed out as negating an eliminative action for the local affection, especially as regards the entire volume of the systemic blood.

In a following article, embodying “analytical considerations of morbid anatomy,” I shall show that this congestion is, according to the capacity of the affected capillaries to distend and resist pressure, an extreme result; also, that its resolution, which follows directly after maximum congestion is reached, is accomplished by lateral pressure.

The facts, then, that this congestion or engorgement is strictly passive from obstruction and filling; that it is not composed of renewed but stagnant blood, and is increased by accumulation merely; that it is limited, not by a change in the irritant nature of the causal influence, but by extreme vascular capacity; that its resolution is the result of lateral mechanical pressure; and, lastly, that it is composed of venous instead of arterial blood—make it unlike an inflammatory congestion.

(2.) The nature of the exudate, which is the second result, and forms the anatomical element of consolidation, is not inflammatory. Its excessive amount, as compared to the amount of an undoubted inflammatory exudate of like grade and character, the latter being hæmorrhagic; its course, formation by simple coagulation, firm consistency, brief duration, immediate degeneration, ready liquefaction, and complete disappearance by absorption and expectoration, are unlike that of any other exudate, and can not be regarded as inflammatory. The brief time required for the removal of this exudate, considering its amount, has no parallel in an inflammatory exudate of like histological constituents.

This exudate consists histologically of preformed elements, the result of normally acting nutritive functions, in which it differs from any inflammatory exudate, which consists of newly formed elements, the result of deranged and abnormal nutritive forces, and these elements again vary according to the degree of each inflammatory process.

One of the results of this exudation and its formation is consolidation of the affected lung structure. This consolidation, by the rapidity of its formation, solidity, transient character, and in leaving no sequelæ other than debility, is unlike any inflammatory exudate.

(3.) The fact that this process as a whole, while forming,

resolving, or as completed, causes or has caused no alteration of the pulmonary structure, except as noted, either in the vascular or connective-tissue elements, corresponding to well-recognized results of every grade, or any grade of inflammatory action in other structure, or when such action is had upon the lung structure itself, as in bronchitis, chronic bronchitis, pleuritis or phthisis, is most conclusive proof that neither the action nor the results of this process are inflammatory. And it is quite as significant, as showing a non-inflammatory action for this process, that throughout, although these organs ramify in every minute section of the involved area, the lymphatics are uninjured and continue their function. That they are continuously active throughout, we may conclude by observing the increased amount of fibrine found in the blood after this process begins, and by the more apparent increase of coloring matter in the urine, the hæmatine of the disintegrating red blood-globules which is being excreted through their action.

In support of the fact that the pulmonary structure is uninjured except from temporary innutrition by this process, we have the evidence first of clinical observation, which through physical examination finds the affected organ, at an early day, resuming its complete function. Second, we have the evidence of authoritative histological observers. Rindfleisch ("Pathological Histology," p. 425, 1872) says: "A recently hepatized piece of lung is injected from the pulmonary artery with a blue gelatinous mass, then hardened, and thin sections made. Upon these sections we find the alveolar walls exactly constituted as though we had injected a perfectly healthy lung (*a*), the same number of intervascular and vascular nuclei, that most external layer of scattered, rudimentary nuclei which we regard as the remains of the epithelium, all unchanged. And yet within the lumen (of the alveoli) there is a finely filamented coagulum (*b*) which incloses numerous colored and colorless cells." He goes on to say (and this I consider important): "The cells must therefore proceed directly from the vessels they must have passed through, migrated through their walls, although we can not discover the slightest abnormal opening upon the walls. This evidently complete microscopic observation establishes so far the fact as stated, that although exudation has occurred, has filled the air-cells, and therefore is complete, yet the alveolar walls have not suffered, but are found to be in the same patent condition as in a healthy lung; and the remaining element of the pulmonary stroma, the capillaries, shows no abnormal opening upon their walls.

For further and corroborating evidence upon this point we refer to Delafield ("Studies in Pathological Anatomy," 1882), who says: "In the earlier stages of red hepatization the vessels of the lungs are full of blood, the walls of the air-vesicles are unchanged. Although the blood-vessels are full of blood, it is not coagulated, and the vessels are easily filled with an artificial injection after death. This recent and, as we know, careful author not only confirms the truth of Rindfleisch's observations in regard to the condition of the air-vesicles, that they are unchanged, but he carries us still further; he tells us the blood in the vessels is un-

changed, "not coagulated," and that "the vessels themselves are easily filled with an injection after death." From which we may justly infer that the internal vascular tunic, as we have seen of the vascular walls externally, is uninjured. The fact that the pulmonary capillaries can be injected at any stage of the pneumonic process, with little or no considerable force, is well known, and does not require further confirmation.

From the facts already given, then, we have a complete picture of the lung stroma, and we find every organic element of which it is comprised, and at the height of, or at any time during this action, unimpaired; which is most conclusive proof of the non-inflammatory or negative character of the action which has taken place. The opinion that there is no inflammatory impairment of the lung, and hence that there has been no inflammatory action present, is further corroborated by Flint, who says, "In favorable cases, after the removal of the exudation, the air-vesicles are found to have sustained no damage."

That the process at work in the local affection is not inflammatory we may decide, furthermore, from the negative results of the degree of the existing action in general, and by the absence of anything like more or less permanent sequelæ after its termination. The anatomical character of the pulmonary structure, its highly predominating vascular element, its connective tissue stroma, and the loose arrangement of these, being everywhere permeated by the air spaces, favor serious results, destructive, or at least more or less permanently adhesive, from a true inflammatory action. The capillary vascular supply, the rich character of its plexus, of which Kölliker says: "It is one of the closest in the human body," of itself, considering the acute nature of the manifest action being hæmorrhagic and, therefore, of high inflammatory grade, would especially favor destructive results from inflammation. The minute character of these capillaries, which Aitken says ("Science and Practice of Med.," p. 794) "average only from $\frac{1}{100000}$ to $\frac{5}{100000}$ of a line in diameter," and their nearness to each other (the pulmonary capillary meshes are only 0.002" to 0.008" in diameter [Kölliker]), favor—the one, destructive effects upon the capillaries by their more or less perfect closure, the other, their general cohesion into one mass.

The structural arrangements of the entire pulmonary elements, as well as their histological characters; their closely contiguous yet distinctly separate parts, favor adhesive results from inflammatory action such as occur in pericarditis or in basilar meningitis. The acute nature, as stated, of the manifest action *per se*, and the grade of such action as indicated by its resulting exudate, justify for such action more or less permanent pathological circulatory or respiratory results.

But when we recall the fact that, although this action occurs in a structure so abundantly supplied with capillary vessels, and so favorably constructed anatomically for adhesive results, that it causes an abundant fibrinous and hæmorrhagic exudate, and that this exudate solidifies and distends the entire organ, that the structure immediately involved histologically favors at least adhesive results, and yet such sequence does not occur, it is reasonable to con-

clude that it—such action—lacks the essential or true inflammatory element.

Again, if the action were inflammatory, the grade manifested in every sthenic case should end in a destruction of the parts involved, either anatomical or functional. This deduction, I claim, is quite admissible in view of the fact just referred to, that in pericarditis with a like sthenic action—not more so, as judged by the general symptoms—the opposing serous surfaces become joined in spite of the free cardiac movements which make adhesions vastly more difficult than where similar structures are affected in this process which have comparatively little relative action.

Furthermore, if there were present in this process, as the cause of its action, the essential character of an inflammation, estimating the extent of the structures involved, there should be some degree of pulmonary phlebitis and inflammatory stasis; some results of such action on the distal side of its original and primary site, as a sequence of which, when resolution takes place and this material breaks up, there should occur, as in any other phlebitis, and especially so if, as is claimed, the genesis of pneumonia resides in a blood-poison, many and innumerable emboli and their consequences. As there is no stasis of the blood in pneumonia, and as there result no embolic sequelæ in the course of its resolution, we may for these reasons also conclude there has been no inflammatory action.

A study of pulmonary infarctus from embolus, just suggested, which embodies a condition of hepatization so called, and its consequences, and which comprises a degree of infarcted peripheric inflammation, and a comparison of its course and results with those of a pneumonic action, also argue for the latter a non-inflammatory character.

Briefly recapitulating: The facts that the lung stroma has received or sustained no damage; that the exudation does not conform to, is not adequate with or like an inflammatory exudate, which will be more definitely shown later on; that lymphatic action is not inhibited—render the hypothesis of an inflammatory action for this process untenable if not conclusively negative.

But the equally significant facts that this process is not caused by contiguous inflammations, and does not communicate them; that it can not be produced by any of the usual causes of inflammation, however strong or weak their action; that it is always developed irrespective of extrinsic agencies of whatever character acting directly upon the pulmonary tissues; that one important sign of an inflammatory action, an increase of local heat, both subjectively and objectively, is wanting—which symptom is present in degree in every acute inflammatory action, however small or circumscribed in area; that as a process it is more prone to attack certain localities of the lungs than others—which can not be explained upon the hypothesis that it is an inflammation, that it is continuously local, not diffuse—and, lastly, the fact that the process is developed from and by carbonic afferent, and therefore devitalized blood instead of arterialized blood, which is required to sustain an inflammatory action; and, that this blood is stagnant, not active, and is not renewed in the affected vessels—these

many points fully corroborate the conclusion reached above, that the anatomical process of acute lobar pneumonia is not an inflammation.

Book Notices.

A Practical Treatise on Diseases of the Skin, for the Use of Students and Practitioners. By JAMES NEVINS HYDE, A. M., M. D., Professor of Skin and Venereal Diseases, Rush Medical College, Chicago, etc. Philadelphia: Henry C. Lea's Son & Co., 1883. Pp. 572.

THE aspirant for distinction in a special department of medicine rarely escapes the temptation to write a book. Till that is done he believes his success can never be assured. It is the most available while at the same time an honorable method of presenting before his medical brethren his claims to recognition as a competent specialist. The task of publicly reviewing his work, falling as it usually does upon a co-worker in the same department of medicine, is not always a pleasant one. To criticize it harshly seems almost as ungracious as finding fault with a letter of introduction. But self-advertisement not being the avowed motive of such a book, but rather the imparting of information to those not so well informed as the writer, the latter ought not to complain if the critic tries to indicate certain points in which the value of the work to the reader might be enhanced.

To begin with, the style of writing is a matter of some importance even in a purely scientific work. Perspicacity certainly is essential. Fluency in composition and beauty of expression, though less important, tend greatly to lessen the labor of reading. Involved sentences, unusual phrases, redundant or indefinite adjectives, add to the strain upon the reader's attention, and may even become vexatious. To what extent the writer of the work before us has erred in these particulars would perhaps be too much a matter of taste for us to express a decided opinion upon. Suffice it to say that his promise given in the preface, "to write concisely," might have been more scrupulously regarded.

The matter of Dr. Hyde's book, consisting, as it mainly does, of materials drawn from authoritative sources, contains few questions of fact that require criticism. It is chiefly to the manner of elucidating the subjects discussed that exception may be taken. The descriptions of the different diseases, though in the main given with sufficient correctness, often fail to bring out as sharply as might be the features which are most essential. Matters comparatively unimportant, which may have impressed the writer because of their exceptional character, are sometimes made unduly prominent. Treatment is not, as a rule, defined as clearly as it should be. Much has been compiled in this connection that would bear pruning. The tendency has been rather to give an array of prescriptions than to systematize principles and indications clearly.

In our hasty perusal we turned first to the subject of eczema, unquestionably the most important subject with which the dermatologist has to deal. At the outset we encountered in the writer's definition of the disease the somewhat vague expression, "one or several . . . lesions appear . . . either successively or simultaneously." In the succeeding description of the disease appear several statements which, not being strictly accurate, are liable to mislead. Thus, the statement that papular eczema attacks "particularly the scrotum"; that erythematous eczema is especially common upon the palms and soles; that eczema ru-

brum is characterized by "dark-colored crusts"; that glycosuria may not be the cause of eczema of the genital region—at least such is the purport of the writer's remarks on page 153. A somewhat exaggerated account is given of infantile eczema of the face, accompanied by "perverted mental tone," of which an indication is that the child "will pick off and devour the crusts with voracity." Pruritus causes the patient to scratch with "an incalculable [*sic*] savagery." Reference is made to "Paget's disease of the nipple," but the points of differential diagnosis between it and simple eczema on the one hand and pronounced cancer on the other are very imperfectly given. In the matter of treatment the writer has little new to offer. We are surprised that his resources furnish him no better application for erythematous eczema of the face than "strips of raw beef," a remedy suggested, perhaps, by the raw clam of popular ophthalmology. Finally, we think the writer fails to indicate with sufficient clearness the necessity of immovable dressings in infantile eczema, apparently reserving them for extreme cases only; and the virtues of the impermeable (rubber) dressing are passed over too lightly.

Through other portions of the book, among many commendable features, we discover some that invite further criticism. *Herpes progenitalis* is declared to be always the result of sexual erethism—too sweeping a statement. In his definition of zoster the writer makes no mention of the rule of nervous distribution, while prominence is given to such a non-essential and exceptional feature as the formation of cicatrices. His description of the localization of zoster is too partial and incomplete. He speaks of "disorders of deglutition and dental losses" in connection with zoster of the superior maxillary branch of the tri-facial as though common accompaniments. Ecthyma is declared to be due to a phlegmon; that is, inflammation of cellular tissue, apparently making it differ from furunculosis solely in the absence of a slough. Of molluscum, the writer says that it resembles "the lesions of variola more than any other cutaneous phenomena." In what the resemblance consists, except it be in the slight umbilication of the former, we are at a loss to comprehend. This statement, if taken in connection with the singularly indefinite wood-cut given of the disease, would, we fear, scarcely assist one in making a diagnosis. Operating on these little tumors by excision or ligature, as advised by the writer, is, according to our experience, rarely called for. Simply pressing out the contents is usually sufficient.

We are surprised to learn that Dr. Hyde ranks chrysarobin as second to tar in the treatment of psoriasis.

A decided innovation is made by the author in considering *pityriasis rubra* and *pemphigus foliaceus* as varieties of a single disease, which he terms *dermatitis ex foliativa generalis*. We see no reason why, with equal propriety, *pemphigus vulgaris* should not be included under the same head. *Pemphigus foliaceus* is but a malignant form of *pemphigus vulgaris*, of which it not infrequently is the sequel. On the other hand, *pityriasis rubra* is never a vesicular disease, and never attended with moist exfoliation. Nor does it implicate mucous membrane as pemphigus foliaceus commonly does. Moreover, one is especially a disease of adults, while the other is quite as apt to attack children as grown people.

We are unable to agree with the author's opinion that in syco-sis non-parasitica epilation can be entirely dispensed with. We believe there are few cases in which removal of the hairs from the diseased follicles will not materially facilitate and curtail the subsequent treatment. But in *tinea trichophytina* the writer indorses the use of the "calotte," a crude and cruel method of epilation, which we had supposed had long been obsolete.

In speaking of the treatment of pigmentary diseases, the

writer apparently mistakes the point of Hebra's treatment by corrosive sublimate washes, the efficacy of which depends solely upon the fact that the application of a strong solution of the sublimate is not followed by superpigmentation, as a sinapism is, or as various other irritants are, but leaves a white surface afterward.

The *bacillus lepræ*, as an ætiological factor in leprosy, is rejected solely on the strength of the investigations of Schmidt, which we think is showing scant justice to a large number of opposed investigators, whose conclusions are being more and more accepted.

On the whole, few of the defects that we have found in Dr. Hyde's book are of a very vital character. Perhaps hasty writing would account for nearly all of them, which the revision of a succeeding edition (and we wish the author many) can easily remedy.

Clínica Terapéutica. Tratado de Terapéutica Médica, ó Guía para la Aplicación de los Principales Modos de Medicación á la Indicación Terapéutica y al Tratamiento de las Enfermedades. Por el Doctor A. FERRAND, Médico de los Hospitales de París, etc. Traducida del Frances por los Señores D. Pedro Espina y Martínez, Ex-Alumno Interno, etc., y D. Antonio Espina y Capo, Premio Extraordinario de la Facultad de Medicina de Madrid, etc. Con un Prólogo-Introducción del Dr. D. Francisco Javier de Castro, Catedrático de Terapéutica en la Facultad de Medicina de Madrid. Madrid: Administración de la "Revista de Medicina y Cirugía Prácticas," 1883. Pp. 815.

DR. FERRAND's "Treatise on Medical Therapeutics" comes to us for the first time in a Spanish dress. Of the faithfulness of the Spanish version we therefore feel scarcely qualified to judge; and our remarks will be confined to the matter of the book, and to the ideas which the author puts forth upon the vexed subject of therapeutic philosophy.

Dr. Ferrand, it may be observed, is a man who combines in no mean degree subtlety of reasoning with that lucidity of presentation which seems characteristic of the French writers. And so, with considerable ingenuity and with captivating plausibility, he has succeeded in evolving from one fundamental principle an entire body of medicinal philosophy, made up of many therapeutic propositions, mutually consistent and of apparently axiomatic certainty. And, though it is the tendency of scientific thought to look with great suspicion on systems reared thus in a day, and not built up by the slow and toilsome accretion of the labors of many workers, we can not but regard with much hopefulness any theory which will offer us an escape from the confusion which now reigns over the field of therapeutics.

The fundamental idea of Dr. Ferrand's book is that of the indication. Instead, therefore, of considering, as Tronseau did, the facts of therapeutics in such order as would be suggested by a systematic treatise on drugs classified according to some preconceived theory, and instead of following out each disease, and the treatment which it demands, as has been done scores of times already, he has pursued a middle course. What this is will be seen more fully later on. The general plan of his book, however, is as follows: He first considers the two factors which must be regarded in the administration of a remedy. One is the disease, looked upon as an entity possessing a specific nature, a physiological form, and an anatomical seat. The other is the medicine itself, in regard to which we must learn—what the author is at pains to point out—the general facts relative to its introduction, its absorption, its elimination, and its mode of action. After this preliminary statement, the author proceeds to an investigation of the indications furnished by the various

conditions of health. Under this head he understands those afforded by the constitution and temperament of the patient, by the age and sex, by certain physiological states, such as menstruation, pregnancy, and lactation, and by different conditions allied to disease, like obesity and the debility of convalescence, or that produced by irregular habits of life. Again, the effects of race, climate, profession, and diet, as determining the indication, receive consideration in separate chapters. In a discussion so general, of course, there is little to criticise. Most of the author's remarks are judicious, many are suggestive.

The bulk of the work is taken up with the statement of individual therapeutic principles and their application to special therapeutic practice. In doing this, Ferrand follows out a systematic classification of morbid action based upon what might be called the physiology of the latter. That is, disease is considered to be not so much a disorder of a special organ as the disturbance of a special function. Accordingly, in the first place, he regards disturbances of nervous function, then disorders of vascular action, then derangements of secretion and of nutrition, and finally alteration in the composition of the blood. And under each of these general headings subordinate divisions are made according to the special character of the functional alteration, whether in the direction of excess, of deficiency, or of perversion. Next naturally comes the consideration of those morbid actions which can not be regarded as mere perturbations of physiological functions—such, for instance, as inflammations, pyrexia, infectious and constitutional diseases, intoxications, and parasitic affections.

In treating of each variety of morbid action, the author pursues the same method: namely, he discusses first its characteristic features; i. e., its general morbid anatomy, macroscopical and microscopical, its symptoms, its course, and its results; then he takes up the subject of its causation and goes over this in considerable detail; then follows a description of the different kinds of indication whose fulfillment can oppose the morbid action, either directly or through its causes and in its sequelæ. After this, the varieties which this morbid action assumes in different organs are considered, together with the corresponding variations in the indication. Here the author enters so fully into detail as to give a brief account of his views of treatment of each disease, thus, in effect, adding a systematic treatise on special therapeutics to his general outline.

An example will perhaps better illustrate this system of classification and order of treatment. Let us take, for instance, the general heading of alterations of the blood-vascular function. Such alterations may, obviously, be either in the direction of excess (hyperæmia), of deficiency (anæmia), or of perversion (hæmorrhage). Under the two former heads, Dr. Ferrand, after considering the general characters and general indications of excessive and diminished blood-supply, analyzes the specific treatment of congestion and of anæmia of each of the organs, taking up, for instance, in succession, congestion of the brain and of the spinal column, congestion of the lungs, congestion of the gastro-intestinal tract (including hæmorrhoidal congestion), and congestion of the liver, spleen, and kidneys, and finally the forms of congestion induced by fevers and organic disease of the heart; then treating of anæmia in general, anæmia of the brain (syncope), and anæmia of the viscera in general, and especially of the uterus. In a similar way, the chapter upon hæmorrhage begins with a description of its general symptomatology, its attendant pathological changes—coagulation, changes in the constitution of the blood, etc.—and the effects upon the viscera and the nervous system. Then follows a short general statement of the causes of hæmorrhage somewhat after the manner of von Niemeyer. The therapeutics of hæmorrhage in general Ferrand

divides into the hygienic treatment, consisting of a series of prophylactic regulations against anything tending to produce rupture of blood-vessels or increased blood-tension, and the medicinal treatment by means of hæmostatics, astringents, agents modifying vascular tension, cardiac depressants, and the various revulsives. The therapeutics of special hæmorrhages is considered in the following order: The hæmorrhages of the hæmorrhagic diathesis, and of purpura and scurvy with hæmatidrosis, then hæmorrhages of the mucous membranes, including bleeding from the mouth, hæmatemesis, enterorrhagia, bleeding from piles, epistaxis, hæmoptysis, hæmaturia, and metrorrhagia; next, hæmorrhages of the serous membranes and pelvic hæmatocele; next, parenchymatous effusions of blood, comprising cerebral, spinal, and pulmonary apoplexies, and apoplexies of the other viscera; and, finally, hæmorrhages occurring in inflammatory conditions and in fevers, and hæmorrhages due to septic or toxic agencies. In following an arrangement like this, the author is enabled to show how the general principles of treatment which he has already laid down suffice for all the various morbid processes which he enumerates, and how, nevertheless, the varying organic conditions impose certain restrictions upon these rules and render a special line of therapeutics necessary.

Such is the method which Dr. Ferrand has pursued rigorously throughout his book. The reader is, therefore, in a position, from the lengthy analysis which we have given, to form a just idea of the merits and the demerits of the work itself; for, it being assumed beforehand that the execution of the details is well done, the character of such a work must be determined solely by that of its methods. Our judgment of this matter can be readily summed up. Dr. Ferrand's system has the very great advantage that it tends to the production of a philosophical as opposed to a purely empirical method of treatment; it draws attention to the inter-relations of allied diseases on a common basis, and to the way in which their variations from a common type are constituted; and it shows how, in the treatment of every disease, there are two factors—the indication which determines it, and the form of the disease which modifies it. On the other hand, the system leads, it must be confessed, to somewhat arbitrary distinctions. We are not always able to fix so exactly upon the existing pathological condition as the author's scheme renders necessary. We are not able, therefore, to fulfill the causal indication; and yet, proceeding on the grounds furnished by the symptoms alone, we may arrive at satisfactory results. A still more formidable, although allied, objection is the proposition of the empirics—that the indication is not a sure guide in treatment, inasmuch as, while fulfilling it, we frequently fail in curing the disease; and, on the other hand, we often succeed by the use of agents which answer no known indication. But this objection, we think, is founded in our ignorance of the methods in which drugs act. And, in any case, it will require little reflection to convince a thinking man that the science of therapeutics has advanced just in proportion as it has become less empirical and more philosophical; in other words, just so far as man has learned to use remedies not because they are good in certain diseases, but because he knows how they do good in certain conditions. Therapeutics, therefore, is certainly advancing in the lines which Dr. Ferrand has marked out.

We have already indicated a possible reservation of judgment as to the merits of the book, based upon the excellence with which its details are executed. It was to be expected of a man of Dr. Ferrand's ability that the details would be well done; and such is the case. Of course, there is much to which individual readers will take exception; there is still more which time and increasing knowledge will alter; but, on the whole, the therapeutic precepts of the book, representing as they do the mature opinions of one of the most accomplished writers

upon the subject, will receive the approval of most of us, and command the respect of all.

The Diseases of Women. A Manual for Physicians and Students.

By HEINRICH FRITSCH, M. D., Professor of Gynæcology and Obstetrics at the University of Halle. Translated by ISIDOR FURST. With 159 wood engravings. New York: William Wood & Co., 1883. Pp. vi-355. [Wood's Library of Standard Medical Authors.]

A FEW years ago Fritsch made a good impression by writing an excellent book on obstetric operations. It is since that time that he has attained to his professorship, and all who are familiar with contemporary German work in obstetrics and gynæcology are aware that he has not been idle in the mean time. He must, therefore, have gathered a stock of experience and practical familiarity fitting him to write a more systematic work, like the one now under notice. Critical examination will convince any competent reader, we think, that the book justifies the expectations fairly deducible from the foregoing considerations. It is, indeed, a thoroughly good one—so good in its substance that we wish it were better in its style. We have not seen the German edition, but we remember that the author's other book, to which we referred in the opening sentence of this notice, contained a great many puzzling abbreviations and colloquialisms, so that we can not hold the translator wholly answerable for the obscurities and the solecisms that will vex the reader of this volume; but we do blame him for having made his translation too literal and for having allowed a number of Germanisms to mar his rendering. In some instances, too, he seems to have failed to give the author's meaning. For example, on page 215 we read that the Hodge pessary "*stretches* the vagina, but does not *dilate* it." Any one conversant with Fritsch's views on the action of the instrument in question would understand at once that he meant to say that it stretched the vagina lengthwise, but did not enlarge its caliber; but a novice could only look upon the two statements as contradictory. It is possible, however, that the author himself was careless in choosing his words.

While on the subject of style, we may as well speak of the illustrations. Some of them are excellent, but many of them are lacking in clearness of outline. We infer that most of them have been copied from the originals by the photographic process. This does well enough as a general thing, and in most instances a publisher is perfectly justified in saving expense by such a device; but the line ought to be drawn somewhere, and we object decidedly to a reproduction that gives us German words instead of English, as in Fig. 119 (page 209), where for *bladder* we read *Blase*!

The author's ideas of the topographical anatomy of the pelvic contents are to a great extent those held by Schultze, of Jena, and we believe them to be correct in the main, although we can not admit that the uterus is normally in such a decided state of ante flexion as Fritsch and Schultze teach. In one particular a gross misstatement is made—so gross, indeed, that it must be a mere slip of the pen. We refer to this assertion (page 11): "In the recumbent woman the vagina lies almost horizontally." The fact is that, in that posture, its direction is almost vertical, being nearly horizontal when the woman is standing.

That portion of the work that is devoted to the so-called "displacements" of the uterus is admirable, all the more so for being strikingly at variance with the writings of nearly all authors. Since the mechanical conditions involved are so simple and so obvious, it is a marvel that most gynæcologists are so hopelessly in error concerning them. It can proceed only from lack of original investigation, the place of which has been usurped by too ready an acceptance of the plausible but really

unfounded doctrines handed down from one writer to another. The limits of our space will not allow us to go into details, but we may illustrate the difference between the views held by the few authors of which Fritsch is one and those that generally pass current by remarking that the former never fall into the disgraceful blunder of attributing a lever-like action to the Hodge pessary. They know that all it can possibly do is to carry the posterior wall of the vagina upward and backward, dragging the cervix in the same direction, and thus cause the body of the organ to drop forward.

We are glad to find that Professor Fritsch inculcates a proper spirit of tenderness in dealing with patients, both as to the matter of inflicting bodily pain and in regard to the duty of sparing their feelings as much as possible—considerations which, we are sorry to say, do not often seem to be taken into account by Continental writers. We are pleased to observe, too, that he shows a fair appreciation of the work done by American gynæcologists. In one respect, however, he has fallen into an error of statement. Speaking of the use of Bozeman's speculum with the patient lying on her back, he says: "Although the inventor applies it with the screw below, I have found it more advantageous to reverse the speculum." The fact is, that Dr. Bozeman uses his instrument with the screw directed toward the pubic symphysis, as Fritsch prefers.

We are surprised to find that the subject of laceration of the cervix uteri is not considered in the book. Whatever the author's opinion may be as to its pathological significance, it is certainly a matter that has engaged the attention of gynæcologists all over the world, and one that the author of a text-book ought consequently to include among the subjects discussed.

On the whole, Fritsch's book seems to us likely to make a decided impression, and we consider it as of unquestionable value.

On the Relation of the Chest Movements to Prognosis in Lung Disease, and on the Application of Stethometry to Examinations for Life Assurance. By ARTHUR RANSOME, M. D., M. A. (Cantab.), Physician to the Hospital for Consumption and Diseases of the Throat, Manchester, etc. With illustrations. London: Macmillan & Co., 1882. Pp. ix-100. [Price, \$2.50.]

WHATEVER merit may be attached to stethometry, it is to the author of this book that credit is due for its advocacy. The stethometer which he has devised is either a two-plane or a three-plane instrument, according as it is to register the movements of the chest-wall in the upward and forward directions, or in these *plus* the outward direction. Except for one who is constantly making examinations of the chest, we should say there was too much machinery about the instrument, and that it was too liable to get out of order, and so record the chest movements inaccurately, where precision is all important. A specialist, of course, would exercise particular care and attention that its lever and cogs and indicators should move with as little friction as possible. For the general practitioner, and indeed for any one who is at all expert in physical diagnosis, we think there is no instrument so sensitive in appreciating the movements of the chest-wall as the hand used in palpation. The author has undoubtedly acquired great expertness in the use of his instrument, hence his opinion of its value. We doubt whether it will ever be considered indispensable either for diagnosis or for prognosis. As to Dr. Ransome's claim that it enables one to inform a patient of the probable duration of certain chronic pulmonary diseases, we fail to see its power over the ordinary methods, especially since these same chronic diseases are influenced by many fortuitous conditions. Simplicity of method is nowhere more imperative than in the investigation

and treatment of disease, and it is hard to conceive of anything more simple or more perfect than the common and accepted methods of physical diagnosis.

Deep Breathing as a Means of Promoting the Art of Song, and of Curing Weaknesses and Affections of the Throat and Lungs, especially Consumption. By SOPHIA MARQUISE A. CIOCOLINA. Illustrated. Translated from the German by EDGAR S. WERNER. New York: M. L. Holbrook & Co. Pp. 48.

A Ponderous title for so small a book, and yet its brevity is its chief and only merit. It is written in the school-girl's-composition style, but with a freer use of the personal pronoun of the first person than is common in such effusions. The subject is certainly an important one, but it will not be difficult for the laity, for whom the book is written, to realize that something beside deep breathing, or an attempt at deep breathing, will be necessary to cure consumption and the other ills for which this plan is recommended.

The Microscope and its Revelations. By WILLIAM B. CARPENTER, C. B., M. D., LL. D., etc., Corresponding Member of the Institute of France, etc. Sixth edition, illustrated by twenty-six plates and five hundred wood engravings. Two volumes. New York: William Wood & Co., 1883. Pp. xi-386; iv-354.

A WORK so well known as this one is, and by so competent a man as Professor Carpenter, needs no commendation. In this edition it will no doubt prove very acceptable. The wood-cuts, although not very well printed, answer the purpose of illustrating the author's meaning well enough.

BOOKS AND PAMPHLETS RECEIVED.

Anatomy, Descriptive and Surgical. By Henry Gray, F. R. S., etc., Lecturer on Anatomy at St. George's Hospital Medical School. With an Introduction on General Anatomy and Development, by T. Holmes, M. A. Cantab., Surgeon to St. George's Hospital, etc. The Drawings by H. V. Carter, M. D., late Demonstrator of Anatomy at St. George's Hospital. With Additional Drawings in Later Editions. Edited by T. Pickering Pick, Surgeon to St. George's Hospital, etc. A new American from the Tenth English Edition, to which is added "Landmarks, Medical and Surgical," by Luther Holden, F. R. C. S. With Additions by William W. Keen, M. D. Philadelphia: Henry C. Lea's Son & Co., 1883. Pp. 1023.

Practical Histology and Pathology. By Heneage Gibbes, M. D., Lecturer on Physiology and Histology in the Medical School of Westminster Hospital, etc. Second edition. Philadelphia: Presley Blakiston, Son & Co., 1883. Pp. viii-154. [Price, \$1.50.]

The Principles and Practice of Surgery, being a Treatise on Surgical Diseases and Injuries. By D. Hayes Agnew, M. D., LL. D., Professor of Surgery in the Medical Department of the University of Pennsylvania. Profusely illustrated. Vol. III. Philadelphia: J. B. Lippincott & Co., 1883. Pp. 784. [Price, \$7.50.]

Contribuzione allo Studio della Fibra Nervosa Midollata ed Osservazioni sui Corpuscoli Amilacei dell' Encefalo e Midollo Spinale. Memoria di Antonio Ceci, Professore d'Istologia Normale ed Anatomia Patologica nell' Università di Camerino. Roma, 1881. 4to, pp. 23.

Dei Germin ed Organismi Inferiori contenuti dalle Terre Marliche e Comuni. Ricerche Sperimentali del Dott. Antonio Ceci, Professore di Anatomia Patologica e Clinica Chirurgica all' Università di Camerino. (Dall' Istituto Patologico di Praga.) Roma, 1882. 4to, pp. 118.

The Pharmacopœia of the Northeastern Hospital for Children. Compiled by a Committee of the Staff. London: J. & A. Churchill, 1883. 12mo, pp. 32. [Interleaved.]

Medical Society of the State of Tennessee. Transactions, 1883.

Twelfth Annual Announcement of the Southern Medical College, Atlanta, Ga.

Report on Diseases of Women, etc. By R. J. Nunn, M. D., Savannah, Ga. [Reprint from the "Transactions of the Medical Association of Georgia."]

Transactions of the Medical Society of the State of Pennsylvania at its Thirty-fourth Annual Session, held at Norristown, May 9, 10, 11, 1883. Vol. XV. Philadelphia, 1883.

Medical Communications of the Massachusetts Medical Society. Vol. XIII, No. ii, 1883. Boston, 1883.

Transactions of the Michigan State Medical Society for the year 1883. Vol. VIII, No. iii, 1883. Lansing, 1883.

Report of the Board of Health of the State of Louisiana to the General Assembly, for the year 1882 and the first six months of 1883, embracing the Quarantine and Sanitary Operations of the Board of Health during a Period of Eighteen Months, January 1, 1882, to July 1, 1883. Baton Rouge, 1883.

Answer of Thad. M. Stevens, M. D., to Charges of the Indiana State Board of Health, together with Statements in Proof and Other Matters. Indianapolis, 1883. [Reprint from the "Transactions of the Indiana State Medical Society."]

Présence de bactériens dans la sérosité péritonéale de la hernie étranglée et de l'occlusion intestinale. Par le Dr. G. Nepveu, Ancien Interne, etc. Note présentée à la Société de biologie, séance du 9 juin, 1883. Paris: Alphonse Derenne, 1883. Pp. 14.

Remarks on Hydrophobia. By Charles W. Dulles, M. D., etc. [Reprint from the "Philadelphia Medical Times."]

The Hygiene of Exposure, being the Address in Hygiene delivered at the thirty-fourth annual meeting of the Medical Society of the State of Pennsylvania. By Henry Leffmann, M. D., etc. [Reprint from the "Transactions."]

On Shock. By Wm. H. Meyers, M. D., Fort Wayne. [Reprint from the "Transactions of the Indiana State Medical Society."]

A Tracheotomy Tube for Gradual Withdrawal, and Report of a Case in which it was used. By H. F. Hendrix, M. D., of St. Louis. [Reprint from the "St. Louis Medical and Surgical Journal."]

Massage: its Application; and a new Operating Table. By Franklin H. Martin, M. D., etc. [Reprint from the "Chicago Medical Journal and Examiner."]

Report, for the year 1882-1883, of H. A. Newton, Director, to the Board of Managers of the Observatory in Yale College, presented by them to the President and Fellows; to which is appended the Report of the Astronomer in charge of the Horological and Thermometric Bureaus.

A Report on Laceration of the Cervix Uteri. By T. B. Harvey, M. D., etc.

Six Pamphlets on "Opium Addiction," by J. B. Mattison, M. D., etc.

The New York Post-Graduate Medical School. Announcement of the Second Year—Sessions of 1883-'84.

Second Annual Announcement of the Hospital Medical College of Evansville, Indiana. Session of 1883-'84.

Annual Announcement of the Physio-Medical College of Indiana, Indianapolis. Eleventh Regular Session, 1883-'84.

THE SURVIVAL OF THE FITTEST.—A medical gentleman has asked if the doctrine of the survival of the fittest has any bearing upon the question of longevity in epileptics.

THE
NEW YORK MEDICAL JOURNAL,
A Weekly Review of Medicine.

Published by
D. APPLETON & Co.

Edited by
FRANK P. FOSTER, M. D.

NEW YORK, SATURDAY, SEPT. 8, 1883.

THOMSONISM IN A NEW DRESS.

It is not often that the annual announcement of a medical college shows any noteworthy deviation from the prosaic, but it must be said of the announcement of the "Physio-medical College of Indiana" that it is a singularly amusing document. From it, or rather from an address appended to it, which was delivered before the "Physio-medical Association of Indiana" last May, by a member of the faculty, we learn that physio-medicalism is "Thomsonism cultivated, improved, and advanced"—that is, it is refined gold gilded, a painted lily, to judge from the picture the same address gives of Thomsonism pure and simple. The author of the address does not leave us with this bald definition, however, but goes on to amplify it. Physio-medicalism, he says, is "medicine in harmony with all the functions of life. It is medicine in harmony with vitality itself and with all the structures of the body, with the blood and all the bioplasm." Now, the author of the address, who is no less a personage than the professor of botany, materia medica, and therapeutics, has not merely heard somebody speak the word bioplasm, but he must have seen it in print, for he actually spells it right. Fancy medicine in harmony with *all* the bioplasm! Not a single atom of bioplasm dissents.

We thought we knew what Thomsonism was, or had been, and we suppose that after all this we ought to have a tolerably clear idea of what physio-medicalism is. Perhaps the reason we have not is that our knowledge of "all the bioplasm" is defective. Bioplasm is one of the words that are good to use when the object is to inspire respect, and it matters little that one knows nothing about the thing itself, for nobody knows enough about it to convict him of any glaring ignorance. But the world has a way of estimating the hidden part of a man's character by what it has been able to observe of the other part, and when such lofty terms are ventured upon it is well to use common expressions as they are used by men of sense. We can not say that the professor has thoroughly guarded himself in this respect, for he gives his readers to understand that in Thomson's time the "regular doctors blistered and bled and poisoned and famished their patients," but that, under all these accumulating horrors, they did not all die, but "many who survived were maimed and injured for life."

But we must turn away from the address, and direct our attention to the college, the instruction in which, the professor tells us, covers the usual curriculum "from a physio-medical standpoint," "with specialties enough to fill all the chinks," and "they have all the modern improvements in every direction," he adds—including "water laid on," if we may judge from some doggerel attributed to Thomson. The college no longer has a

dean. In point of fact, the faculty "has always ruled the business," and it now proclaims that to have a dean is "a very improper state of affairs in this age of independent thought and action." The last incumbent of the office, feeling that he was "only a human being," and knowing that some physio-medical colleges had "been ruined by the deans exercising the power vested in them by virtue of the title," magnanimously abdicated, and now humbly does duty as a clerk.

Notwithstanding the perfection that appertains to everything connected with the college, it was not until last year, the tenth of its existence, that the faculty discovered the fact that the prevention of disease was of importance, as well as its cure. This fact they deduced from the "satisfaction" given by one M. Veenboer, M. D., of Michigan, who gave a few lectures on sanitary science last year. If the faculty were not so thoroughly persuaded that it is worth while to try to prevent disease, we might suggest a suspension of judgment, for, surely, little if anything is to be gained by avoiding an occasion to subject one's self to so delightful a course of medication as the one that is in harmony with "all the bioplasm."

Although we have exceeded the space that we could afford to devote to revealing the beauties of this pamphlet, we have by no means alluded to a great proportion of them. Indeed, the production fairly glitters with gems, being almost as sparkling as "English as She is Spoke." With all their literary accomplishments, however, we fear the "physio-medicalists" are, after all, nothing but the "herb doctors" of bygone years.

OUR ETIQUETTE FROM A CANADIAN POINT OF VIEW.

LAST week we alluded to certain matters of taste, that had been twisted into matters of ethics, concerning the professional cards of some physicians in Missouri. But the society before which these vital affairs came up condoned the alleged offenses, not on the ground that they were *costumbres del país*, but for the reason that they were committed "several years ago." The cards in question, our readers may remember, were quite remarkable, but perhaps, on the whole, not much more so than one we have lately seen setting forth the qualifications, etc., of a practitioner in Montreal. Suppressing the gentleman's name, together with some other features that might lead to his identification, the card reads as follows:

_____, M. D.,
PHYSICIAN, SURGEON,
_____, Street, Montreal.
Graduate in Medicine 1863, _____ University.
Licentiate 1863, Member 1868, College of _____, L. C.
Member 1869, College of _____, Ontario.
Member 1881, _____ Association, England.
Member, _____ Society, Montreal.
Senior _____, Board of Health, Montreal.
Director Canadian _____ Institute.

Treats Specially:

NERVOUS DISORDERS IN BOTH SEXES, NERVE EXHAUSTION, INEBRIETY, AND DISEASES OF WOMEN AND CHILDREN.

Noteworthy as this card is in itself, it becomes positively startling in connection with the purpose for which it was sent

to New York. The gentleman whose titles and far-reaching specialties it blazons has not been successful in making as much money by practicing in Canada as he would have liked to make. This failure he attributes not to any shortcomings of his own, but to the narrow notions of ethics that obtain in Canada, whereby men are forced to eschew various means of acquainting the public with their capabilities, and have simply to wait for the public to find them out for itself. This does not suit our Canadian friend. He pines for a land of greater liberty. He has evidently pictured to himself the style in which he might bloom out in the United States, and the picture has proved so attractive to him that he has been moved to broach his fond aspirations in a letter to one of our leading physicians, in which letter the foregoing considerations are set forth. Although he yearns particularly for New York, he adds that he has no objection to Baltimore or Washington. He is willing to serve as an assistant to some eminent practitioner, confident, no doubt, of his ability sooner or later to outshine his principal. All he wants is "a chance."

Now, we do not entertain the supposition that the style of man this many-titled practitioner seems to be is at all representative of our brethren in Canada, for, from all we know of them, they are far too sensible and manly to use reduced show-bills for cards and then whine about being kept down by the prevailing squeamishness in matters of ethics. Probably the practitioner in question has already alienated his Montreal brethren by his vulgar and ostentatious display of titles and qualifications, and so deprived himself of that countenance of his peers that should be the first step to his success, for certainly, if such a card is tolerated, what he considers narrow in his countrymen is broad to the verge of infinity in comparison with what he would encounter in New York. Probably nowhere in the world is a display of medical titles more relentlessly tabooed than in the older communities of the United States. We are compelled, therefore, to advise our unhappy Canadian to give up his dream of American license, and we doubt not he would do well to shorten sail somewhat in his own city.

THE AMERICAN DERMATOLOGICAL ASSOCIATION.

WITH perhaps the single exception of gynecology, the study of diseases of the skin is doubtless the branch of medicine in which the most telling work has been done in this country during the last few years. We have before expressed ourselves to this effect. The New York Dermatological Society has steadily furthered this progress during the period of about fifteen years for which it has existed. Its influence in this direction still goes on. Its usefulness, however, is almost restricted to the individuals who make up its membership, reaching the profession at large in scarcely any other way than by making its members better teachers of dermatology than they would be without it, and so indirectly endowing the young men who graduate from the New York schools with solid acquirements in this branch of medicine. This limitation of the society's sphere of action is largely due to the great preponderance of the clinical element in its proceedings. Certainly, it accomplishes its peculiar work

so well that no one conversant with the specialty could wish for any change in its plan, unless indeed it were our only organization devoted to dermatology. As things are, it is most admirably supplemented by the American Dermatological Association, the proceedings of which consist of formal papers and the discussions called forth upon them.

Our readers will see, from the account we give elsewhere in this issue of the association's seventh annual meeting, that that occasion was no exception to the successful meetings that have made up the history of the organization. On the contrary, we are inclined to think that this year's meeting may well be considered one of the most satisfactory that have ever been held, whether we take into account the representative character of the gentlemen in attendance or the number, the variety, and the intrinsic worth of the papers they presented. The practical element was well brought out in Dr. Piffard's paper on the "Treatment of Acne," Dr. Duhring's paper on the "Sulphide of Zinc in the Treatment of Lupus Erythematosus," and Dr. Van Harlingen's narrative of "Experiments in the Use of Naphthol," while the other papers dealt with matters of very great pathological interest.

The discussions show a substantial agreement on important points that tends to mark the progress of dermatology toward the comparatively finished state of the leading departments of medicine. Yet enough diversity of views was manifested to show that that state has not yet been reached, but that original thought abounds sufficiently to prevent stagnation. It is interesting to note, on the one hand, the real accord on the subjects presented by Dr. Taylor, Dr. Hyde, and Dr. Stelwagon, and, on the other hand, the success met with by Dr. Graham, Dr. Sherwell, and Dr. Fox in bringing up matters that call for further study. The other contributions were mainly of a clinical nature, but they were nevertheless such as could fairly be brought to the attention of an assembly of this sort. On the whole, the practical seems to have been judiciously interspersed with the theoretical, and both appear to have met with careful consideration. If the success of this meeting may be taken as a test, the association certainly did well to re-elect Dr. Taylor to the presidency.

MINOR PARAGRAPHS.

THE GARFIELD MEMORIAL HOSPITAL.

THE statement having lately been made that the plan of establishing the hospital had been abandoned for lack of support, we are glad to learn, on the authority of a member of the hospital board, that the report is untrue. A piece of property has been obtained at the head of Tenth Street, in Washington, on which there is a brick building which, it is thought, can be made available for hospital purposes by some alterations and additions. The latter are to be carried out under the superintendence of Surgeon J. S. Billings, of the army.

THE CINCINNATI BOARD OF HEALTH.

THE solitary medical member of Cincinnati's disreputable board of health, Dr. J. C. Beck, seems to have turned upon his critics, having caused warrants to be issued for the arrest of two persons connected with a newspaper called the "Penny

Post," on a charge of criminal libel. The paper had published statements to the effect that Dr. Beck had made appointments for a money consideration.

A NEW BUILDING FOR THE HEALTH DEPARTMENT.

It is understood that the President of the Board of Health is preparing an application to the Board of Estimate and Apportionment for funds with which to provide a new building for the use of the Health Department. Heretofore the department has occupied a portion of the Police Department's building. In view of the increasing bulk and the valuable nature of the records kept by the Bureau of Vital Statistics, and of the increasing duties of the department in general, there can be no doubt that a new building will be found to be positively necessary before many years.

A SUGGESTION TO THE SOCIETY FOR THE PREVENTION OF CRUELTY TO CHILDREN.

THE casual wayfarer in any of our city parks can scarcely have failed to be struck at times, and altogether too often, with the brutality exercised by nurses toward the little children intrusted to their care, toppling them over and dragging them about as if they were legitimate objects on which to vent their annoyance. To say nothing of the bad effect such treatment must often have upon the moral nature of an observant and imitative child, there can be no doubt that serious and lasting physical injuries are often the result. There is abundant reason to believe that the most prolific source of hip disease, and certain affections of the spine, is injury inflicted in some way or another, and very often of a degree so slight as to escape the attention of those who are not aware of the facts in regard to such cases. If the Society for the Prevention of Cruelty to Children would take the matter in hand, and detail one of its officers to each of the parks, we are confident that much good would be effected.

CHICAGO LARD.

"IN the course of a dispute between Chicago dealers in lard," said the "Boston Medical and Surgical Journal" for August 2d, "it has been incidentally disclosed that most American lard is adulterated from ten to one hundred per cent. with oleo-margarine, stearine, cotton-seed oil, tallow, and terra alba." Replying to this sweeping allegation, the "Weekly Medical Review," of Chicago and St. Louis, states that evidence will shortly be published concerning the matter, and that it will not be found to justify the imputation.

A NEW MEXICAN JOURNAL.

BORN in Spain and in Central America many new medical journals have sprung up during the last few months. The newest one we have seen is the "Revista Medico-quirurgica de México," published three times a month, each number containing ten large double-columned pages. The first number, dated August 10, 1883, contains an article on amputation of the leg at the point of election, illustrated with some very creditable cuts, together with several abstracts and news items. The "Revista" is owned and edited by Dr. V. Blay, Dr. T. Noriega, and Dr. J. Robles.

A CHARITABLE BEQUEST NULLIFIED.

A LADY died some time since in Chicago, leaving all her property to her mother on the condition that she made a will leaving all that might be unspent at her death to some Chicago institution for the benefit of women. The mother refused to take the property subject to this condition, and maintained that by

such a refusal the daughter practically became intestate and the property would come to her as heir at law without any restrictions. The Woman's Hospital of the State of Illinois and the Chicago Hospital for Women and Children did not take this view, but each asserted that it was a suitable institution to take the property under the will, and that the evident charitable intention of the testatrix could not be defeated in this indirect manner. The Court held, however, that neither of the hospitals could have an interest unless the mother made her will in their favor; that, as she refused to do this, there was no way of compelling her to such a course, and that their claims must be dismissed. The clear and strong desire of the daughter to benefit her sex by a large bequest was thus absolutely frustrated.

NEWS ITEMS.

INFECTIOUS DISEASES IN NEW YORK.—We are indebted to the Sanitary Bureau of the Health Department for the following statement of cases and deaths reported during the two weeks ending September 4, 1883:

	Week ending Aug. 28.		Week ending Sept. 4.	
	Cases.	Deaths.	Cases.	Deaths.
Typhus	1	0	0	1
Typhoid fever	63	17	67	24
Scarlet fever	45	8	32	2
Cerebro-spinal meningitis	2	1	8	8
Measles	22	8	19	1
Diphtheria	28	14	27	21

YELLOW FEVER.—On Thursday of last week three new cases were reported from the Pensacola Navy-Yard. The same day the board of health of the town passed resolutions declaring that there was no longer any reason for neighboring towns to maintain a quarantine against Pensacola, and authorizing the president of the board to represent the fact to those towns, and ask that the quarantine be raised. On the same day the Surgeon-General of the Marine-Hospital Service received official information from Ship Island that there were twelve vessels in quarantine there, from which nineteen yellow-fever patients had been taken, all from Vera Cruz.

On Friday no new cases were reported from the Pensacola Navy-Yard, and there were no deaths there.

On Saturday one Dr. Basso, who had presented himself at Pensacola for the purpose of curing yellow fever with a uostrum, was attacked with the disease, and died on Monday.

Up to midday on Tuesday no new cases had been reported.

THE CHOLERA has continued to decrease steadily during the week in Egypt, and the epidemic is now thought to be nearly at an end. A supposed case was reported from Milwaukee last week, but opinions were divided as to its real nature, and, as no further report has reached us from that quarter, it seems probable that the disease was not true Asiatic cholera.

INFECTIOUS DISEASES OF DOMESTIC ANIMALS.—The Texas cattle fever is reported to have broken out in Detroit, anthrax is said to be raging in the country about Lancaster, Pa., and a disease of an uncertain nature caused the death of thirteen cows on one farm near Newburg, N. Y., during the last week in August, the course of the disease being not longer than twelve hours in each instance. A hundred more Canadian cattle were reported on Thursday of last week to have been slaughtered at Liverpool, as they were suspected of being infected with disease. The remaining cattle of the same shipment were released and sent to various markets.

THE EIGHTH ANNUAL MEETING OF THE AMERICAN GYNECOLOGICAL SOCIETY will be held in Philadelphia, at the Hall of the College of Physicians, on Tuesday, Wednesday, and Thursday,

September 18th, 19th, and 20th. Papers are expected to be read as follows: "Superinvolution of the Uterus," by Dr. Joseph Taber Johnson, of Washington; "The Importance of Cleanliness in Surgical Operations," by Dr. Z. Stansbury Sutton, of Pittsburg, Pa.; "Some Points Connected with the Subject of Dysmenorrhœa," by Dr. C. D. Palmer, of Cincinnati; "An Unusual Form of Abdominal Tumor—three cases," by Dr. Thaddeus A. Reamy, of Cincinnati; "Is Extirpation of the Cancerous Uterus a Justifiable Operation?" by Dr. A. Reeves Jackson, of Chicago; "A Biographical Sketch of Dr. Nathan Smith, founder of the Dartmouth Medical College" (being the President's address), by Dr. Gilman Kimball, of Lowell, Mass.; "The Management of Accidental Puncture and Other Injuries of the Gravid Uterus as a Complication of Laparotomy," by Dr. Charles Carroll Lee, of New York; "A New Method of Operating for Fistula in Ano," by Dr. Edward W. Jenks, of Chicago; "Ergot: the Use and Abuse of this Dangerous Remedy," by Dr. George J. Engelmann, of St. Louis; "Congenital Fissure of the Female Urethra with Extrophy of the Bladder," and "Menstruation after Extirpation of the Ovaries," by Dr. Henry F. Campbell, of Augusta, Ga.; "Remarks on Chronic Abscess of the Pelvis," by Dr. William H. Byford, of Chicago. A discussion on Death after Labor will be opened by Dr. Campbell.

THE PENNSYLVANIA AND MARYLAND UNION MEDICAL ASSOCIATION, composed of representatives from the medical societies of the counties of Franklin, York, Lancaster, Chester, Lebanon, Cumberland, Perry, and Dauphin, in Pennsylvania, and Harford and Cecil, in Maryland, held its sixth annual meeting at a place near Chambersburg, Pa., on the 30th of August. Dr. W. W. Dale, of Carlisle, Pa., in the chair. Dr. J. L. Zeigler, of Mount Joy, was elected president for the coming year; Dr. S. B. Keefer, of Carlisle, and Dr. John Lineaweaver, of Columbia, vice-presidents; and Dr. S. J. Rouse, of York, secretary and treasurer.

THE HAY FEVER ASSOCIATION.—At the tenth annual meeting of the United States Hay Fever Association, held recently at Bethlehem, N. H., a vote was taken on the merits of "Townsend's remedy." Ten of the members had used it, but not one had found it of service.

THE MEDICO-LEGAL SOCIETY.—At the meeting to be held on Wednesday evening of next week, Dr. R. L. Parsons will read a paper entitled "Jury Trial of the Insane."

THE CULTIVATION OF CINCHONA IN SOUTH AMERICA.—Extensive preparations are said to be in progress for experiments in the cultivation of the cinchona tree in South America and Mexico, including the selection of sites for planting 5,000,000 trees.

THE INDIANA STATE BOARD OF HEALTH is meeting with criticism for alleged inefficiency, due, it is said, to its having embarked in political intrigues. Its secretary, Dr. E. R. Hawn, who was appointed after Dr. Thaddeus M. Stevens was deposed, has lately died, and the board was to meet on Thursday to choose his successor.

THE GERMAN UNIVERSITIES.—The following changes have been made in addition to those we have before recorded: At Vienna, Professor Nothnagel's assistant, Dr. Jaksch, has been made a Privat-Dozent in medicine; Professor Schwalbe, of Königsberg, succeeds Professor Waldeyer at Strassburg as professor of anatomy; Dr. Fischer, a Privat-Dozent, has been appointed extraordinary professor of surgery at Strassburg; and Professor E. Baumann goes from Freiburg to Breslau as ordinary professor of physiology.

ST. JOSEPH'S HOSPITAL, IN LANCASTER, PA., having been sold at sheriff's sale, has been bought by the Sisters of St. Francis,

of Philadelphia, who, it is announced, will make it a free hospital.

CREMATION PROPOSED IN NEW ORLEANS.—It was reported from New Orleans last week that the Grand Jury had suggested the establishment of a crematory, under the direction of the authorities of Charity Hospital, for the purpose of incinerating the bodies of persons dead of infectious diseases.

AN ASYLUM ASSAULT CASE IN PHILADELPHIA.—A keeper in the lunatic department of the Philadelphia Almshouse was suspended from duty last Saturday for having struck one of the patients. Maintaining that he had done this in self-defense, he was told by the superintendent that, when attacked by a patient, he should run and call for assistants to help control the man without hurting him, to which he replied, shaking his head defiantly, "I'll never run."

THE HUNTER ALLEGED MALPRACTICE CASE, an outline of which we gave two weeks ago, is likely, as we then hinted, to turn out a creation of Dr. Hunter's imagination, for he has since committed suicide, and a natural inference is that he was insane at the time of Mrs. Hunter's death.

DR. JOSEPH C. HUTCHISON, OF BROOKLYN, our readers will regret to learn, met with a serious injury last week while driving at Lake George. He was thrown from the carriage, and sustained a fracture of the thigh. He has been taken to his home in Brooklyn, and we are glad to be able to say that the reports give promise of his prompt recovery.

OBITUARY NOTES.

JAMES DOWLING TRASK, M. D., OF ASTORIA, N. Y.—Dr. Trask died on Sunday, the 2d inst., after a short illness. He was born in Beverly, Mass., in 1821, was graduated in arts at Amherst College in 1839, and received his medical degree from the Medical Department of the University of the City of New York in 1844. He began practice in Brooklyn, then removed to White Plains, and finally, in 1859, settled in Astoria. He was at one time professor of obstetrics and diseases of women and children in the Long Island College Hospital, and was one of the founders of the American Gynecological Society, of which he was last year a member of the council. He was highly esteemed as a practitioner, and his memory will be perpetuated by several important contributions made by him to the literature of obstetrics, especially by an article on the use of iodine in the treatment of post-partum hæmorrhage.

CHARLES WRIGHT, M. D.—On Sunday, the 2d inst., Dr. Wright, a resident of New York, died in London. He was a graduate of the Medical Department of the University of the City of New York, class of 1853, and a member of the Medical Society of the County of New York, the Academy of Medicine, the Medico-Legal Society, and the Society for the Relief of the Widows and Orphans of Medical Men.

EDWARD F. BARNES, M. D., OF CLAREMONT, N. H.—Dr. Barnes died on Tuesday, August 28th, at the age of thirty-three. He was born in Claremont, November 2, 1850, and received his education in the Stevens High School in that place, graduating from it with high honors in 1871. In 1877 he was graduated from Bellevue Hospital Medical College, and, after a short stay in Decatur, Ill., he settled in his native town, where he remained until his death. The Claremont Medical Association, of which he was a member, has passed suitable resolutions.

M. CARADEC, OF BRITANNY.—The death of this eminent surgeon is announced to have taken place recently, as the result of septicæmia following a punctured wound inflicted during an operation on a hospital patient.

Proceedings of Societies.

AMERICAN DERMATOLOGICAL ASSOCIATION.

THE seventh annual meeting was held at Lake George, N. Y., August 29, 30, and 31, 1883.

First Day.—Morning Session.

The meeting was held at the Sagamore House, and the association was called to order at 10.30 o'clock by the President, Dr. R. W. TAYLOR, of New York, who welcomed the members with a few appropriate remarks.

THE TREATMENT OF ACNE.—Dr. H. G. PIFFARD, of New York, read a paper on this subject; the term acne was restricted to inflammation of the sebaceous glands. This affection never began, and relapses never occurred, without sufficient cause, and the first indication was to seek for, and, if possible, remove the ætiological factor; whether gastric, intestinal, uterine, or the like, it was only partly true that acne was an incurable disease. It was apt to relapse, but could be cured for the time being quite easily. Its course might often be shortened. Dr. Piffard then related the case of a patient with ovarian trouble, the removal of which was followed by a cure of the acne. He also referred to a case of chronic incurable organic uterine disease in which a severe acne existed that persisted despite treatment, and stated that in such instances all that could be reasonably expected was temporary alleviation.

Acute Acne Vulgaris.—The drug which he had administered internally with the most satisfactory results was the calx sulphurata, in small doses, to be discontinued as soon as good results were manifested. Next in efficacy was the bromide of arsenic in doses of $\frac{1}{100}$ to $\frac{1}{50}$ of a grain; a one-per-cent. alcoholic solution administered in doses of from one to two minims (not drops) in a wineglassful of water upon an empty stomach. As the acne improved, he lessened the doses. He had found the former drug most serviceable in the lymphatic variety, and the latter in acne of the florid type. For external treatment he used depletion by incision, and bathing with warm (not hot) water. In simple cases he punctured the papules, and punctured each fresh papule as it appeared. The next external application recommended was frequent bathing with *very hot* water. In the pustular variety the pustules should be punctured, the contents squeezed out, and the parts bathed with *hot* water to reduce the congestion. Other external applications mentioned were soothing agents, such as belladonna and stramonium; belladonna liniment mixed with benzoated lard, sometimes with ammoniated mercury; and fluid extract of stramonium, made from the fresh leaves gathered in the autumn, incorporated with benzoated lard in the proportion of one drachm to the ounce.

Subacute Acne Vulgaris.—Calx sulphurata should be used in much larger doses than in the acute form, and continued until the action of the drug is manifested by increased activity of the eruption, perhaps by an increased number of the lesions, and perhaps by a tendency to suppuration. In occasional cases he used mercury (corrosive sublimate), iodide of potassium, or ergot. In the external treatment the principal indication was the employment of applications which produced an irritant or substitutive inflammation, such as green soap, sulphur, biniodide of mercury, and corrosive sublimate, which, acting as irritants, were followed by hyperæmia with swelling, etc. When the action had reached a proper limit, the remedy should be stopped and the parts allowed to return to the healthy state. The strength of these applications must be varied according to the effects produced. It was well to begin with applications of moderate strength. The author then referred to the views of

the Vienna and French schools, and to the practice of English and American dermatologists. With regard to ergot, as recommended by Dr. Denslow, of New York, given in doses of 20 or 30 grains twice or three times a day, and continued for several weeks, he had seen some cases in which benefit followed.

Comedones.—These yielded only to mechanical treatment. Remove them by pressure upon the surrounding skin, and, if the sebaceous plug does not readily come out, enlarge the mouth of the duct with a fine needle.

Acne indurata, whether acute or subacute, might be regarded as an aggravated acne vulgaris, and the principles of treatment were substantially the same as in acne vulgaris. The most striking results he had seen follow the use of ergot had occurred in this form of the disease.

Dr. I. E. ATKINSON, of Baltimore, had used the sulphide of calcium faithfully, but had failed to produce the favorable results which, from time to time, had been reported. He had used ergot, but also without noteworthy benefit. Whatever of benefit he had seen had been from the use of local applications, together with such remedies and measures as were indicated to correct or remove the gastric, intestinal, or uterine disorders which were generally considered to be causes of this local inflammation.

Dr. A. VAN HARLINGEN, of Philadelphia, had used with considerable benefit in several cases of comedones the following, smeared over the elevations: Official acetic acid, two parts, glycerin, three parts, and kaolin, four parts.

Dr. W. T. ALEXANDER, of New York, had used calx sulphurata with considerable benefit, but usually only in the pustular variety. On the other hand, he referred to a case in which the remedy administered in small doses four times a day exhibited lack of power to arrest suppuration. The only good effect he had seen follow the use of ergot was a seeming diminution of the redness, but only so long as the drug was being taken.

Dr. S. SHERWELL, of Brooklyn, had not employed the sulphide of calcium. He had obtained sufficiently good results by the use of external applications with the use of internal remedies, especially ergot. He had found cannabis indica of great benefit in acute forms of the disease, tending to the pustular state. He associated acute pustular acne with menstrual disturbances very decidedly, and always employed ergot, moderately during the period, more freely between the periods, especially just before and just after the occurrence of one. He could speak with certainty of the beneficial effects produced by the drug in this form of acne in women, and had thought benefit followed its use in men. In the rosaceous form of acne he had found ergot especially beneficial. He regarded its use as empirical, in all probability; at least, he did not accept Dr. Denslow's view that it acted upon the muscular tissue of the skin.

Dr. GRAHAM, of Toronto, had found calx sulphurata useful in suppurative diseases, whether acute or the formation of abscess.

THE PRESIDENT said the interest in the paper centered upon the relative importance of local and of constitutional treatment. He wished to record his belief again that a curative influence was exerted only by local measures, and that internal treatment was only subsidiary. As regarded the reciprocal relations between acne and uterine affections, he had not yet reached any definite conclusions. That they existed at the same time in the same patient was well recognized, but he had not yet become satisfied as to whether there was any causal relation between the two conditions. In the treatment of acute acne he had placed great reliance on alkalies and diuretics; one or two drachms of Rochelle salt with thirty grains of the acetate of

potassium in a wineglassful of water three times a day. In the hyperæmic form he always produced benefit by this medication, and also in the indurated variety. Besides puncturing, as recommended by Dr. Piffard, he had been accustomed to apply liquor hydrargyri pernitrat, 1 to 8 of water, once or twice a day. He had also used with marked benefit, both in that and the rosaceous form, half a drachm of chrysarobin to one ounce of flexible collodion, brushed over the patches. The use of the remedy necessitated sequestration of the patient for some time. He had also succeeded in the treatment of acne indurata by the use of Donovan's solution, pushed until ten or twelve drops were taken at a dose, three times a day. In his hands ergot had not cured a single case. It had relieved the hyperæmia, but had had no effect upon the induration. In the various forms of acne he had brought about the most gratifying results by the use of mercurial ointment—1 to 8 of vaseline—or an ointment of biniodide of mercury.

Dr. STELWAGON, of Philadelphia, had seen good results from the use of a lotion of sulphate of zinc, one drachm, sulphide of potassium, one drachm, and water, four ounces.

The PRESIDENT and Dr. SHERWELL had used this lotion with good results. The President had used an ointment of iodide of zinc, 5 to 30 grains to one ounce of vaseline or lard, with excellent results.

GENERAL EXFOLIATIVE DERMATITIS.—Dr. GRAHAM, of Toronto, then read a paper in which he first directed attention to the signification of the term, and then made brief allusion to the literature of the subject. He had collected 34 cases, of which 11 terminated fatally and 10 in recovery, while in 7 the recovery was partial or the result was not known. In 8 cases the disease ran an acute course, not lasting longer than a few weeks, and in 25 it was chronic, lasting for months or years. He had had four cases under observation, two of which were of a chronic character, and two acute and recurrent. In the third case the seizures recurred at various seasons of the year, and in the fourth case the first three took place in summer and the fourth in March. In both, the disease ran a very similar course, except that in the latter there was a vesicular eruption in the beginning. It was probable that many cases of general exfoliative dermatitis had been mistaken for scarlet fever. The principal features of the disease might be considered under three heads: 1. General hyperæmia; 2. General exfoliation of the epidermis; and 3. Severe constitutional symptoms appearing at various times throughout the attack, and in many instances a tendency to a fatal result. In some cases there was a serous exudation preceding the hyperæmia and exfoliation. From his observations, the author of the paper agreed with Dr. Baxter and Dr. Jamieson in the opinion that the term general exfoliative dermatitis might be applied to all the cases which were usually described under the names pityriasis rubra and pemphigus foliaceus, as well as to other cases which could not be classed with either. There were two principal subdivisions of the affection: 1, the acute; 2, the chronic. Of the latter there were two varieties: 1, that in which hyperæmia and exfoliation existed, and it might be called dermatitis exfoliativa rubra; 2, that in which a serous exudation, in the form of bullæ, preceded the exfoliation, and this might be called dermatitis bullosa et exfoliativa. The former variety would include pityriasis rubra, and the latter pemphigus foliaceus. The acute form had a strong tendency to recur, influenced by seasons or outward circumstances. The recurrences might be accounted for by individual peculiarities.

Dr. HARDAWAY, of St. Louis, had had under observation one case of five years' standing, which manifested some improvement under the internal use of the tincture of iron, all other methods of treatment having failed. He had seen one quite acute case,

another in an infant, another in a young lady of neurotic family. Since the attack, now six or seven years, the latter had suffered from frequent occurrences of bright hyperæmic spots, varying in size from that of a silver dollar to that of the hand, exceedingly hot and throbbing to the touch, and *without* exfoliation.

Dr. ATKINSON thought it impossible to describe a distinct disease that could be called pityriasis rubra. Again, it was desirable to find some name to apply to certain cases, and he thought general exfoliative dermatitis was as good as any, perhaps. He believed that there was a very wide range in these cases, but that the disease always depended upon trophic neuroses, the nature of which we did not understand. Some cases answered to pityriasis rubra; others showed patches which were undoubtedly eczematous; and then there were chronic cases of exfoliative dermatitis. He regarded it as important to remember that the skin of certain individuals manifested a marked tendency to become inflamed as the result of the internal use of certain drugs; for example, there was a well-marked eruption produced by quinine.

Dr. G. H. FOX, of New York, approved of what Dr. Atkinson had said concerning the advisability of including all forms of dermatitis under the general name, and thought it was fallacious to endeavor to make a differential diagnosis clinically. As to pityriasis rubra and eczema, however, he believed there were reasons for making a distinction, and in many of the cases of general desquamation which were spoken of as exfoliative dermatitis there was an eczematous process which involved the mucous layer of the skin, and was not a disease of the vascular supply, or a primary disturbance of the nervous system, like pityriasis rubra. He thought Dr. Graham had done well in associating the acute and chronic cases.

Dr. P. A. MORROW, of New York, believed the disease to be neurotic in character, and in two cases he had seen decided benefit produced by arsenic.

Dr. SHERWELL thought that an exception should be made with reference to pemphigus foliaceus, as it was sufficiently distinct in character to be entitled to its original name. He accepted Dr. Graham's first division, but not the second.

Dr. PIFFARD thought there were three affections quite distinct: 1, Pemphigus foliaceus; 2, pityriasis rubra; and, 3, dermatitis exfoliativa. He admitted that it was sometimes difficult to make a differential diagnosis, but that fact could not be used as an argument in favor of a general name.

Dr. GRAHAM said he had doubted the propriety of placing pemphigus foliaceus under the head of general exfoliative dermatitis; but, at the same time, the two conditions had so many features in common he had ventured to do so.

The PRESIDENT regarded the further study of the three affections mentioned by Dr. Piffard as very important. He then called attention to two cases. The first occurred in a woman thirty years of age, a widow, the mother of one child, and a sufferer from chronic malarial disease, who had had fifteen attacks produced by taking quinine, cinchonine, or elixir of calisaya. The second case occurred in a man nineteen years of age, who had been under observation five months. The patient had been exhibited to the New York Dermatological Society, and the history, so far as there given, had been published in the July number of the "Journal of Cutaneous and Venereal Diseases." The interest of the case centered in the question whether or not the condition of the skin depended upon syphilis. It was the most remarkable case of exfoliative dermatitis he had ever seen, and was surrounded with grave doubt concerning its ætiology. Dr. Taylor's description of the case was accompanied by several photographic illustrations.

IMPETIGO CONTAGIOSA.—Dr. STELWAGON, of Philadelphia, in a paper on this affection, first referred to its individual nature,

and the correctness of the views advanced by the late Dr. Tilbury Fox. He believed there was no evidence that the disease was in any way related to ringworm, or that it followed contagious pustular affections, as stated by Dr. Hyde, of Chicago. Further, that a pustular disease could not be modified, or, in case a modification could be produced, that the modification could propagate itself. If the disease was not a modification of some other affection, the conclusion must be that it was an independent one, and the individuality of the disease must be admitted. The eruption was contagious. He doubted the view that it was of a fungous nature. In five hundred microscopic examinations he had been unable to find the fungus described by Dr. Piffard except in three instances, and regarded the fungi, when found, as in all probability adventitious. The view that the affection was a systemic disease with cutaneous manifestations seemed to him the most tenable. This was sustained in a measure by the writings of Tilbury Fox, and there were several reasons to support it. Aggregate experience proved the existence of premonitory symptoms, and ordinarily it ran a short but definite course. The eruption was self-inoculable, which explained the existence of new patches. There were several facts against the supposition that the disease followed vaccination. The author's conclusions were: 1, That it was a separate and distinct disease; 2, that it was not parasitic; 3, that it was not related to vaccination; and, 4, that it was an acute systemic disease with cutaneous manifestations, and probably due to a specific poison.

Dr. HARDAWAY regarded the fact that the disease occurred epidemically as a strong argument in favor of its being an independent affection.

Dr. ATKINSON felt very uncertain concerning the individual nature of the disease.

Dr. G. H. ROHÉ, of Baltimore, did not recollect having seen a case during the last two years. That the pus of impetigo contagiosa was inoculable was quite certain; that it was inoculable upon healthy individuals; and that successive inoculations became weaker. He had been unable to find a fungus. That it was an independent disease he was moderately sure; but that it was found only after contagious diseases, and in individuals who were not in good health, as suggested by Dr. Hyde, he did not believe, yet what the exact nature of the disease was he did not know.

Dr. Fox thought it was agreed that the pus was inoculable; that it did not depend so much upon the character of the soil as on the character of the pus, and that the peculiar pustules were not to be classed as those of pustular eczema. He thought Tilbury Fox was unwise in giving the affection a new name. He had generally studied it as a disease of the skin, but the suggestion that it was constitutional was worthy of attention. Dr. Fox was also inclined to doubt the proposition that it has no connection whatever with vaccination; but exactly what the relation was he was unable to say. With regard to pediculosis, it might not produce an eruption, but certainly it would cause the spread of one.

Dr. GRAHAM had always regarded impetigo contagiosa as a distinct disease, and was inclined to agree with Dr. Stelwagon concerning its nature.

Dr. PIFFARD preferred to go back to the old name. He had had a series of cases in different families, and in every instance the first in each series appeared shortly after vaccination, and the other cases followed. As to its parasitic nature, he was still inclined to hold to that view, although no one had found a definite parasite in the vesicle; fungi had been found in the crusts only, and several who had found fungi had found different ones. He found, at the time he made his observations, a permanent fungus, the same as he found in vaccine, and similar ones had

not been described in connection with any other form of disease. If it were a common crust fungus, he would be forced to give up the connection of the disease with vaccination. A point in favor of its parasitic nature was the fact that it was cured so readily with parasitocides. He had not regarded it as a self-limited disease, but thought the explanation given by Dr. Stelwagon was a very ingenious one.

The PRESIDENT was a firm believer in the individuality of the disease. He could not regard it as a systemic affection. The existence of a premonitory fever was exceedingly doubtful. In sixty cases he had observed, the disease began about the face or nails in every instance, and afterward different parts of the body were inoculated. He thought the systemic reaction could be easily explained by the existence of an eruption. He believed it spread by immediate contagion; also that the disease originated in some form of pus which lodged upon the skin, and developed a pustule, from which it was communicated to others, or to other parts of the body.

Dr. Fox had had cases which did not yield readily to treatment, and had remained obstinate for two or more weeks.

Dr. STELWAGON said that sometimes several weeks were required to get rid of the disease.

Dr. ROHÉ did not wish to indorse the view that the disease was systemic in the same sense as scarlet fever, etc., but simply wished to say that he regarded it as inoculable locally.

Dr. HARDAWAY had not seen the disease associated with vaccination.

Evening Session.

The association was called to order at 8 P. M. by the PRESIDENT.

A CASE OF MULTIPLE CACHEOTIC ULCERATION.—Dr. ATKINSON, of Baltimore, then read the case of a female child, mixed white and black, without any evidence of syphilis or diabetes, or the use of either mercury or ergot, or of scurvy. The symptoms were papillation, vesiculation, followed by superficial destruction of tissue and progressive ulceration, which destroyed all the tissues, even the bones. At no point did gangrene occur *en masse*. It was not entirely symmetrical. Motion and sensation were somewhat impaired, but there was no paralysis, nor evidence of itching or pain. Distinct symptoms of vaso-motor disturbance were not observed. Dr. Atkinson thought that there could be no doubt that his case belonged to the group named by Oscar Simon multiple cachectic gangrene, and that it was one of the trophic neuroses.

Dr. VAN HARLINGEN reported a case of trophic neurotic gangrene occurring after amputation of the thigh.

The PRESIDENT reported two cases seen with Dr. W. H. Draper at the clinic at the College of Physicians and Surgeons. The first was that of a puny child, six months old, that had an ulcer upon the back which began as a water-blister. Despite treatment, it extended and became very large, destroying the skin down to the muscles. Under generous diet and tonics it ultimately recovered. The other case occurred in a woman thirty years of age, married, who had never had children, and had never taken ergot. She came with each finger on both hands in a bluish congested condition, but no bullæ existed. There was swelling of the tip of the nose, and upon it was a bulla, which broke down into an ulcer, involving all of the tissues down to the cartilages. The patient lost fully one half of every finger, the thumbs escaping. She finally recovered. The only ætiological factor that could be ascertained was excessive indulgence in buckwheat cakes.

EXPERIMENTS IN THE USE OF NAPHTOL.—Dr. VAN HARLINGEN read a paper in which he gave the conclusions reached by Kaposi, who introduced the use of the remedy, with a summary of his personal experience in its use. He had found it of great

service in scabies, also of some value in the treatment of psoriasis. In parasitic skin diseases it was of but little use, while in eczema and hyperidrosis it was entirely without value.

Dr. Fox had used the remedy externally in almost every case where he could possibly employ it, and had become convinced that it fell far short of taking the place of tar. In a few cases of eczema of the scrotum and anus he had obtained very satisfactory results from the application of a five-per-cent. ointment. For psoriasis of the scalp and face the ordinary white-precipitate ointment had served more satisfactorily.

Dr. WIGGLESWORTH, of Boston, thought Kaposi did not use naphthol so much as formerly. His own experience corroborated that of Dr. Fox.

Dr. HARDWAY had found it very much inferior to chrysophanic acid in psoriasis and eczema. In the fissured and squamous eczema of the palms of the hands and fingers he had used a fifteen-per-cent. ointment with good success.

Dr. STELWAGON thought it inferior to white-precipitate ointment for psoriasis of the scalp, regarded it as very efficient for scabies, and was of the opinion that it was now scarcely used in Vienna except in the treatment of this affection.

Dr. PIFFARD regarded naphthol as a dangerous remedy.

The PRESIDENT had used it with good results in scabies, but in psoriasis it had proved inefficient.

LEPROSY IN NEW BRUNSWICK.—Dr. Fox then read a communication entitled "A Trip to Tracadie," which contained joint propositions submitted by himself and Dr. Graham, of Toronto. Tracadie had a lazaretto where lepers resided. During this summer he had visited the place, and so also had Dr. Graham, under the direction of the Dominion Government. The lazaretto had at present 24 inmates, 11 males and 13 females, and was under the charge of sisters of charity. The disease as seen was partly of the tubercular and partly of the macular variety, and there were three cases which were not leprosy. Some of the cases showed a peculiar skin disease that appeared to be syphilitic in character, although there were no marked lesions of syphilis. As to the white scales so often referred to, he was struck with the fact that both forms showed shining silvery scales, very much like those found in psoriasis, but not having the peculiar circumscribed form. Many of these patients had papular eczema, which gave them much annoyance. Most of those, with the tubercular form especially, presented marked ulcerations of the hard palate; in one case there was perforation. Many of the patients presented a well marked form of dactylitis, without the suspicion of syphilis, but with enlargement of the bones of the toes in one case. Those who had ulceration of the hard palate had also laryngeal trouble; either the peculiar wheezing or complete aphonia. The following propositions were submitted by Dr. Fox and Dr. Graham:

1. Leprosy is a constitutional disease, and in certain cases appears to be hereditary.
2. It is undoubtedly contagious by inoculation.
3. There is no reason for believing that it is transmitted in any other way.
4. Under certain conditions a person may have leprosy and run no risk of transmitting the disease.
5. It is not so liable to be transmitted to others as syphilis is in its early stages. There is no relation between the two diseases.
6. Leprosy is usually a fatal disease, its average duration being from ten to fifteen years.
7. In rare instances there is a tendency to recovery after the disease has existed many years.
8. There is no valid reason for pronouncing the disease incurable.
9. Judicious treatment improves the condition of the pa-

tient, and often causes a temporary disappearance of the symptoms.

10. There is ground for the hope that an improved method of treatment will in time effect the cure of leprosy, or at least that it will correct and control the disease.

Dr. Fox admitted that he had yet to cure his first patient, but he did not believe that leprosy was incurable. The treatment adopted in the New York hospitals, consisting in the use of chaulmoogra oil and large doses of nux vomica, had afforded a degree of success, and he read a letter which showed that the disease in one case had at least been non-progressive for some time. There was no evidence that either physicians or nurses had acquired the disease by attendance upon those affected with it.

Dr. D. B. SIMMONS, who had had a large experience in the treatment of this disease in Japan, was invited to open the discussion. He thought it exceedingly difficult to study leprosy in lazarettos. According to his observation, and the view was fully recognized by the Japanese, the disease manifested itself first in the face, and by a peculiar blushing or lividity of the features, especially after taking wine, etc. The development of this peculiar appearance was sufficient to drive the person immediately into exile. Next the anæsthetic symptoms, usually, are most prominent—anæsthetic spots with any other manifest change in the condition of the skin or the existence of other symptoms. Then the disease showed itself upon the ears or elsewhere, with exacerbations at times, sometimes with fever, bleeding from the nose, etc. His own opinion was that it was decidedly hereditary, but it was exceedingly difficult to reach facts bearing upon this question, because of the prompt exiling of any member of a family who developed the first peculiar symptoms, and the subsequent denial that the disease ever existed in the family. He did not regard it as either contagious or infectious, and it was not regarded by the Japanese as contagious. The duration of the disease was exceedingly variable. He had never succeeded in curing a case, nor had he seen a case which had been cured, but almost without exception every case might be benefited by treatment. Strict attention to hygiene, diet, and cleanliness, aided by the internal and external use of copaiba, had yielded the most favorable results he had obtained.

Dr. ROUS said, if the disease was spread by contagion there was a marked difference in the susceptibility of different persons to its influence; a much more marked difference than existed with reference to any other contagious disease.

Dr. WIGGLESWORTH had studied the disease in Norway and Spain, as well as in the East, and could corroborate Dr. Fox's views concerning the non-communication of the affection to physicians and nurses. His view was that, while it was inoculable it is but faintly, if at all, contagious, and not at all infectious. Nor did he see any thing in the detection of white patches to suggest the existence of the disease.

Dr. GRAHAM regarded the disease as inoculable and infectious. He was also inclined to believe that it was hereditary, although no case in Tracadie had confirmed that impression. He had noted a decidedly marked difference in the susceptibility of different persons, as illustrated by one family especially in Tracadie.

Dr. PIFFARD accepted the ten propositions. He also referred to one instance in which a physician took the disease and died of it. He thought it was utterly impossible to determine in any given case whether the disease was due to heredity or to infection.

PAGET'S DISEASE, OR MALIGNANT PAPILLARY DERMATITIS.—Dr. SHERWELL then read a paper on this subject. He had had two cases, and these, with those recorded by Paget, Butlin, Morris, Thin, and Duhring, made twenty-seven. He had recorded

his first case, the first published in the United States, in the January number of the "Journal of Cutaneous and Venereal Diseases." He gave the following conclusions:

1. The subjective symptoms, itching, burning, are those of an eczema, and not those of an ordinary carcinomatous affection, but they are more marked than in ordinary cases of eczema.

2. The objective symptoms are like those of eczema; the discharge is absolutely similar; it stiffens linen, and forms crusts entirely indistinguishable from those of an impetiginous eczema. The color of the surface is perhaps occasionally more livid, but the border is not more sharply defined than is common in that trouble. The somewhat elevated appearance of the patch simulates exactly the acutely macerated and swollen conditions of the lower epithelial layers we so frequently find in eczema. Sir James Paget compares the appearance to that of a balanitis, an apt illustration.

3. The disappearance of the nipple is spoken of by Henry Morris as a "melting away," a very acceptable term.

4. The "malignant papillary" feature, as described by Thin, was a marked element in my first case; much less so in the second. It is a very diagnostic point, and would of itself, I think, instantly resolve any doubts as between it and true eczema.

5. The extreme length of time may be noted in my cases before the appearance of anything like positive evidence of carcinoma. It will be noticed that Sir James Paget gives the limit, as to this, as two years. In my first case twelve years elapsed from attack to death, the latter event not seeming in any way connected with the skin lesion; in the second case considerable over the time mentioned by Paget had already passed.

Second Day.—Morning Session.

The association was called to order at 10 o'clock by Dr. I. E. ATKINSON, of Baltimore, Vice-President.

Dr. WIGGLESWORTH, in behalf of Dr. White, presented the statistical report, which was accepted. On motion of Dr. Taylor, a vote of thanks was extended to Dr. Wigglesworth for his most valuable services in performing the work which Dr. White, chairman of the committee, had been prevented from doing by reason of absence in Europe.

THE PATHOGENESIS OF DRUG ERUPTIONS.—Dr. P. A. MORROW, of New York, then read a paper in which he included under this head all symptoms caused by either the internal or the external use of drugs. There was a difference of opinion as to whether they should be classed among the physiological or among the toxicological effects. A large proportion of drug symptoms were the expression of the physiological action of the article used. The term pathogenesis was employed with reference to the close relationship between physiological and pathological effects. Dr. Morrow discussed at considerable length the difficulties of distinguishing between the two effects, especially when influenced by individual susceptibilities and other modifying circumstances. He then reviewed the theories advanced in explanation of the phenomena, such as that of the elimination of the drug through the skin, that of a special affinity for the cutaneous structures, and that of the dynamic action of drugs—all of which had been proved to be fallacious. This was followed by a discussion of the neurotic theory, which he believed best explained the phenomena. The paper closed with a reference to the broad meaning of the term idiosyncrasy, as, after all, anomalous eruptions were determined by the individual rather than by the drug. The nervous element predominated in persons who had an idiosyncrasy.

POLYMORPHOUS CHANGES OBSERVED IN THE TUBERCULAR SYPHILIDE.—The President, Dr. R. W. TAYLOR, then read a paper based upon a case of syphilis presenting rather early the tubercular eruption described in the books as the non-ulcerative

tubercular syphilide. The eruption was general, symmetrical, and copious, had the characteristics of the secondary eruption, and, besides, all the deep-seated peculiarities of the tertiary eruption, so that, in order to place it in its chronological relation, it should be called what the French denominate the intermediate eruption. The patient was a man, forty-seven years of age. Dr. Taylor gave a detailed description of the changes which took place in the eruption, and illustrated them by colored photographs. At one period the eruption appeared strikingly like psoriasis, and subsequently like that illustrated by McCall Anderson, and maintained by Fox to be psoriasis rupioides, a condition which might give rise to the suspicion that what those authors had called psoriasis rupioides was only a late form of a papular or tubercular syphilide. The points of interest in the case were the following:

1. Its resemblance to psoriasis.

2. The colloid degeneration of some of the tubercles concomitantly with the increase of the granulation tissue in others.

3. The degeneration of the colloid tissue into pus, and the formation of bullæ.

4. The evidence offered that true bullæ might appear in a syphilitic subject, though they resulted from degeneration of tissue rather than from effusion of serum and pus, as occurred, as a rule, in simple pemphigus.

5. The development of tubercles having thick, imbricated, conical, epidermal crusts like those of rupia.

6. The suggestion offered by these lesions that perhaps the psoriasis rupioides of authors was more or less dependent upon syphilis.

7. The formation of true rupia crusts from the bullæ above spoken of.

8. The fact that the non-ulcerated tubercular syphilide might be the starting-point of severe and extensive gummatous infiltration.

Dr. HARDAWAY related the history of a case of psoriasis rupioides, as described by McCall Anderson, occurring in a non-syphilitic patient. The only departure from the appearance of ordinary simple psoriasis was the heaped-up condition of the scales. The mother of the patient had ordinary psoriasis vulgaris.

Dr. ATKINSON remarked that Dr. Taylor's paper was also interesting as showing the power of syphilis to assume nearly all phases and simulate almost all diseases.

PSEUDO-PSORIASIS OF THE PALM.—Dr. SHERWELL read a paper in which he said that in using this title he inferentially and necessarily included those lesions invading the structures anatomically analogous, the plantar surfaces. As to whether a psoriasis, pure and simple, ever occurred in the regions named, he had steadfastly maintained the negative. He believed a squamous eruption upon the palms (excluding eczema, etc.), resembling psoriasis, always had a syphilitic diathesis for its base, or one of its bases, and was *prima facie* evidence thereof. He did not think, however, that, if it could be decided, any great change in the general treatment would be effected, but he did believe that an eruption of this nature in this location would always lead him intuitively to the employment of Donovan's rather than Fowler's solution. But even here again the result of treatment would evidently not be diagnostic proof. The case which came nearest to convincing him that he was in error in entertaining this belief was one presented to the New York Dermatological Society by Dr. Bulkley, but in that instance grave doubts were expressed by several of the members with regard to its non-syphilitic history. Dr. Sherwell then gave the history of a case.

PSORIASIS AFFECTING THE PALMS.—Dr. W. T. ALEXANDER, of New York, then read a paper in which he gave the histories of

three cases in non-syphilitic patients. The paper was illustrated by photographs.

The discussion on these two papers was opened by Dr. GRAHAM, who reported two cases of psoriasis of the palms in non-syphilitic patients.

Dr. MORROW stated that while psoriasis was extremely rare upon the palms, and while it probably never occurred independent of its development upon other parts of the body, yet clinical facts proved that it might develop upon the palms. He had seen a number of cases of psoriasis of the palms in non-syphilitic patients.

The PRESIDENT had seen the three cases reported by Dr. Alexander, but had been unable to find any evidence of syphilis. He had not seen psoriasis of the palms, or of the body, that did not exhibit psoriasis of the nails first. That simple psoriasis might affect the palms, he thought there was no doubt. He believed, however, that it had never been seen confined to the palm.

Dr. MORROW had seen a case in which the disease was confined to the palm.

Dr. ALEXANDER said he had been struck with the evanescence of psoriasis of the palm, and perhaps that was the reason why it was seen so rarely. He cited a case in which it appeared and disappeared within a few days without treatment.

Dr. SHERWELL said that to prove the absence of syphilis was far more difficult than to prove its presence. Congenital syphilis also formed a part of his theory concerning psoriasis. He had seen simple psoriasis, and then known the patient to contract syphilis, and soon afterward psoriasis of the palms develop, so repeatedly that he must still believe palmar psoriasis had a syphilitic basis. It might be that the syphilis gave the psoriasis a change, so that it appeared in the palms; that view he was prepared to accept.

A STUDY OF THE COINCIDENCE OF SYPHILITIC AND NON-SYPHILITIC AFFECTIONS OF THE SKIN.—A paper with this title, sent by Dr. J. N. HYDE, of Chicago, was read by Dr. WIGGLESWORTH. The more precise and exact the study of the symptoms in syphilis the more clearly two facts would be recognized, which are strictly related:

1. Syphilis resembled other diseases in its career and its subjection to accidental influences much more than had been commonly supposed and taught. 2. When syphilis preceded, co-existed, or followed other pathological conditions, its unity was preserved, and it rarely underwent itself, or induced in other diseases, such a modification as distinctly changed the type of the resulting symptoms. The first statement was supported by the following propositions; the second required clinical demonstration.

a. Allowance being made for a wide field of distribution of its lesions, the study of one hundred consecutive cases of syphilis will convince an unprejudiced observer that such cases resembled each other as closely as a similar number of consecutive cases of pneumonia, typhoid fever, or chronic interstitial nephritis.

b. Syphilis was no exception to the general rule that the patient of greatest vigor best endured its penalties.

c. Syphilis acknowledged subjection to the great accidents which commonly and evidently worked changes in all disease processes in man.

d. Syphilis, like other diseases, might lurk obscurely in the system, but, everything said and done, it must be betrayed by syphilitic symptoms, or we could not admit its existence.

e. Vulgar belief to the contrary notwithstanding, cases of syphilis, like those of other diseases, were readily separable into three well-known groups: 1, mild, benignant, or self-limited, requiring no treatment; 2, the grave, malignant, where treatment could have little or no effect; and, 3, those falling between these two extremes, where judicious treatment was capable of

turning the scale in one direction and injudicious treatment in the other.

f. There was no specific treatment applicable to every case of syphilis which could safely be employed to the exclusion of all others.

The author proceeded to show how far clinical evidence supported the second of the two general propositions, that which recognized the unity of syphilis displayed, in fairly typical symptoms in subjects affected with other diseases, more particularly those involving the skin. Varieties of scabborrhœa and comedo were probably found in more frequent co-existence with syphilis than the other disorders of secretion. Erythema, urticaria, eczema, herpes, the several forms of acne, impetigo, ecthyma, furunculus, anthrax, and the varieties of dermatitis, frequently occurred in subjects of an active syphilis. Herpes zoster he had not seen in a syphilitic subject. To the subject of the coincidence of psoriasis and syphilis the author directed special attention and gave the histories of two cases with very great detail.

Evening Session.

The association was called to order at 8 o'clock by Dr. ATKINSON, Vice-President.

ON THE PECULIAR APPEARANCES OF THE INITIAL LESION OF SYPHILIS AT THE EARLIEST PERIOD OF ITS DEVELOPMENT.—The PRESIDENT read a paper in which he stated that in the "American Journal of Syphilography and Dermatology" for July, 1871, he had published a description of the appearances of an initial lesion of syphilis as observed on the first day of its evolution. These appearances were such that scarcely any one would have suspected the seemingly insignificant spot to be the starting-point of syphilitic infection. A second case of the same kind came under his observation in May, 1883. The details of both cases were given. The first was seen by Professor Boeck, of Christiania, who stated orally to Dr. Taylor that he had observed the same appearance, but Dr. Taylor believed that he was the first to give it a published description. The point of interest in the cases consisted in the peculiar localized silvery appearance of the mucous membrane of the glans penis which was soon to be the site of the true Hunterian chancre. The importance of the early recognition of the nature of this lesion was evident. The practical conclusion was, that at its evolution the initial lesion of syphilis might appear simply as a small non-elevated, silvery spot, seated on the mucous membrane, and without any inflammatory areola. This spot might thus remain superficial and free from ulceration for nearly two weeks, after which time, and even before, it might increase in development and assume the appearances of a typical indurated chancre. Dr. Taylor also described two other appearances presented by the initial lesion of syphilis at its earliest period. (1) A minute, slightly rounded, and excoriated spot, the surface of which was neither ulcerated nor depressed, appearing like a most superficial erosion of the epithelial cells of the mucous membrane. Generally these spots were of a somber red color, which later on might become coppery red, and usually they were not the seat of hyperæmia. Their further course was one of extension on the surface and in depth. In somewhat rare instances numbers of these spots might appear and produce the multiple herpetic form of chancre. (2) A small, slightly elevated papule having a dry and unbroken surface. This form was most frequently seen in persons with a short prepuce, and in those who had none or only the rudiment of one. It began in this subacute, indolent, and insidious manner, and might run its whole course without any ulceration or excoriation; or it might follow the course of the indurated nodule, or become transformed into the parchment-like chancre. Dr. Taylor further stated that several times he had confirmed Boeck's observation that in

children the initial lesion often began as a very minute shining and silvery spot, similar to that just described.

THE VALUE OF A LOTION OF SULPHIDE OF ZINC IN THE TREATMENT OF LUPUS ERYTHEMATOSUS.—A paper by Dr. DUHRING, of Philadelphia, was read by Dr. Stelwagon. Dr. Duhring had used this lotion with marked benefit in the inflammatory superficial forms of the disease, with either discrete or confluent patches, whether recent or of longer duration. He did not put forward for the remedy any specific power over the disease, but in several cases it had been the only remedy tolerated by the skin. The following formula for the lotion was given:

R Sulphate of zinc,
Sulphide of potassium, āā, gr. xxx.
Rose water, ʒ ijss.
Alcohol, 3 ij.
M.

If this strength agreed with the skin, the quantity of the two active ingredients might be increased. The application might be repeated twice or three times in twenty-four hours, the skin being cleansed each time with soap.

Dr. PIFFARD was astonished to hear that so many remedies had been employed in the treatment of a case of lupus, because it seemed so well settled that, in order to get rid of lupus, it must be destroyed. The methods of destroying it which, in the majority of cases, acted best were: First, the use of the curette followed by the cautery, frequently the actual cautery; and, second, scarification. Doubtless the lotion would benefit certain cases, but he was unable to understand how it could effect a cure.

Dr. ALEXANDER had at present a case under treatment in which he had practiced scarification three or four times, and the first operation was followed by the disappearance of one patch of the disease. But since then the only effect produced was to make the patch worse.

Dr. VAN HARLINGEN said that he had seen one of Dr. Duhring's cases, and certainly very marked improvement had followed the use of the lotion.

Several of the members failed to see how the lotion could produce much effect on such a disease as lupus.

Dr. Fox had secured his best results in the treatment of this disease by the local application of pure carbolic acid. He painted it over the part at intervals of a week or ten days, perhaps more frequently. In three cases he had succeeded in effecting a complete cure of the disease. The frequency of the application should depend on the rapidity with which the skin peeled off and left a smooth surface ready for another application. He had not found that it aggravated the disease at all. He had also seen good results from the internal use of phosphorus, and thought that perhaps a judicious use of both remedies might secure still better results than had yet been obtained by either alone.

Dr. STELWAGON said that scarification had aggravated the disease in Dr. Duhring's cases; that pure carbolic acid was applied without effect; and that they were benefited by this lotion only, which was applicable chiefly to the superficial variety of the disease.

Dr. PIFFARD said that the dermatitis referred to by Dr. Stelwagon and Dr. Alexander occurred as a matter of necessity after scarification, but it did no harm. Scarification should be performed with great thoroughness, and the dermatitis which followed was of advantage. It was substantially the treatment recommended by Hardy, namely, to excite a sufficient amount of new inflammation to strangle the new lupus cells.

Dr. HARDAWAY believed firmly in scarification and multiple puncture. He had treated one case successfully, however, by electrolysis.

REPORT OF A CASE OF AINNUM WITH MICROSCOPIO EXAMINATION.—A paper by Dr. DUHRING was read by Dr. Stelwagon. The case was one which came under the observation of Dr. George B. Weston, of West Virginia, and to him Dr. Duhring was indebted for the specimen with the notes. Only a few cases of this disease had been reported in this country, and with reference to them the conclusion had been reached that it was caused by the application of a ligature. The patient was a negro, and the specimen consisted of one of the toes. The microscopic examination was made by Dr. Henry Wile, of Philadelphia, who made it with great care, and came to the conclusion that the principal changes indicated a general inflammatory condition.

Dr. SHERWELL had treated many patients from Jamaica and San Domingo, but especially from Turk's Island, had made inquiry concerning this affection, and had been led to the conclusion that it was due to traumatism from the application of a ligature around the toe; lazy negroes applied a ligature, and became subject to what was known as "ring-toe."

A PECULIAR PAPILLARY ERUPTION.—Dr. HARDAWAY read a paper in which he described a case that had occurred in an otherwise healthy brunette, the eruption affecting the left cheek and both hands, and having existed at least a year, but without any special inconvenience. The size of the papules varied from that of a grain of wheat to that of a split pea, and they were non-pedunculated. The eruption was discrete, of a dull lemon color, and of pellucid appearance. The papules were solid to the touch, and gave the appearance of having liquid contents, but nothing could be obtained by puncture except blood, and nothing could be squeezed from the papules. The eruption disappeared under treatment without leaving any trace whatever. He had had five cases. The treatment for the most part had consisted in the use of a tar-and-mercury ointment. All the cases were chronic. There was no evidence whatever that it was contagious.

Such an eruption as described by Dr. Hardaway had not been seen by any of the members of the association.

LYMPHANGIOMA CUTIS WITH DERMATOLYSIS.—Dr. J. E. GRAHAM, of Toronto, reported a case, illustrated with photographs. The patient was a woman twenty-one years of age. When five years old a tumor appeared in front of the elbow which gradually extended upward and downward. The history from that time had been one of constant increase, and the growth had increased very rapidly during the last year. Its presence had not produced inconvenience. On the anterior surface of the arm the integument hung down in bag-like pouches which changed in color as the arm was raised or hung down. The papillary layer of the corium was hypertrophied, and the skin presented deep furrows. There was brown pigmentation near the elbow, and a few black hairs existed on the surface. The entire growth had a peculiar velvety feel. There was thickening of the skin, but no induration whatever. At the middle of the forearm there was a small tumor which felt like a mass of blood-vessels beneath the skin. The arm could be made smaller by pressure, and especially the small tumors, of which there were two or three. The tumors were not painful. The affected arm was almost as strong as the other. It was possible that the small tumor seen existed at birth, but had been unrecognized. Dilatation of the lymph channels was the probable pathological lesion.

Dr. Fox had seen one case which would bear comparison with Dr. Graham's.

Dr. ATKINSON had seen one case which was almost identical with that reported by Dr. Graham, except that the growth was situated higher up upon the arm. He thought that there was dilatation with new growth of the channels, and regarded such

a case as affording striking proof of the inaccuracy of the view put forward by Dr. Formad concerning the nature of tubercle, as we did not observe tubercular inflammation in these cases, where it was well known that the lymph channels were obstructed.

Dr. PIFFARD thought it practicable to remove the growth in sections by the use of the galvano-caustic ligature.

Dr. ATKINSON thought the probable cause of the disease would remain, and that removal of the growth would be followed by a return of the affection.

Dr. SHERWELL referred to a case of general lymphangiomata.

Friday.—Third Day.

The PRESIDENT called the association to order at 9.30 A. M. The first order of business being the induction of newly elected officers, Dr. R. W. TAYLOR, of New York, re-elected President, congratulated the association on its prosperity and the steady increase of the good work performed, and thanked the members for the confidence expressed by again electing him as their presiding officer.

The *Vice-Presidents* for the ensuing year are Dr. ARTHUR VAN HARLINGEN, of Philadelphia, and Dr. J. E. GRAHAM, of Toronto; *Secretary*, Dr. W. T. ALEXANDER, of New York; *Treasurer* (re-elected), Dr. GEORGE H. ROHÉ, of Baltimore.

The members then examined microscopic sections which had been prepared by Dr. Henry Wilc, of Philadelphia, illustrating *Ainhum and Malignant Papillary Dermatitis* (Paget's disease).

The association then adjourned, to meet, on the last Wednesday in August, 1884, at West Point.

NEW YORK SOCIETY OF GERMAN PHYSICIANS.

A STATED meeting was held November 24, 1882, Dr. B. SCHARLAU in the chair.

ANÆSTHESIA OF BOTH CORNEÆ.—Dr. A. SEESSEL presented a patient with this affection which had lasted for several months. No ulceration had taken place. He discussed the theory of trophic nerves, and the experiments made upon rabbits, with a view of disproving that theory. In these experiments the ears of the animals were made to protect the corneæ by being stitched to the skin in such a way as to cover the eyes. The corneæ remained intact after division of the trifacial nerve, while they speedily exulcerated if no such precaution was taken.

Dr. E. GRUENING said that patients suffering from anæsthesia of the cornea should be told to close their lids often and to use disinfecting washes frequently. If this advice was carried out faithfully from the beginning, destructive ulceration of the eye would always be avoided.

Dr. A. SCHAPFINGER mentioned a case of anæsthesia of both corneæ in a patient who had been under his charge at the Mount Sinai Hospital. There was also ptosis in one eye. When first seen, an ulcer had already formed in the eye in which there was no ptosis, while the other, which was protected by the paralyzed upper lid, remained intact. Under antisyphilitic treatment the corneæ recovered sensibility, the lid became movable, and the corneal ulcer was healed.

AN ENORMOUSLY THICKENED PERITONEUM.—Dr. A. JACOBI showed the specimen, the nodular masses having given rise during life to a mistaken diagnosis. The patient was forty-nine years old when she died. Twelve years before her death ascites made its appearance, with loss of flesh. The veins over the abdomen were considerably distended, and the spleen was enlarged. There were neither hæmorrhages nor diarrhoea. The diagnosis of cirrhosis of the liver was made, and subsequently confirmed by Professor Friedreich, of Heidelberg, who was consulted by the patient during a visit to Europe. Two

years later two gallons of fluid were removed by tapping. After the lapse of twelve months the operation had to be repeated. There was no icterus at any time. Palpation of the liver revealed increased size and toughness. The condition of the patient improved, the spleen became smaller, but slight ascites always remained. Some hard nodules could be felt which appeared to be tumors located within the abdominal cavity. She died from hæmorrhage of the stomach. At the autopsy, cirrhosis of the liver was found. The parietal peritoneum was thickened to the extent of an inch by chronic inflammation, and contained calcareous masses. The nodules formed by the inflammatory deposits had been mistaken for intra-abdominal growths.

A COLLAPSED AND HEPATIZED LUNG.—Dr. JACOBI also presented this specimen, which had been removed from the body of a child. The little patient died from empyema, which had been neglected. A fistula had formed, and this, in connection with the secondary curvature of the spine, led to the diagnosis of Pott's disease, for which the child was put into a plaster-of-Paris jacket in one of the city hospitals. This was so much soiled by the secretions that it had to be removed. Albumin appeared in the urine, profuse diarrhoea and anasarca set in, the patient became extremely anæmic, and finally succumbed. At the autopsy, amyloid degeneration of the liver, spleen, and kidneys was found. The pleura on the diseased side was somewhat thickened. The bronchial glands were considerably enlarged, and showed caseous degeneration.

MELANO-SARCOMA OF THE ORBIT.—Dr. GRUENING presented a phthisical globe which he had enucleated from a man fifty-five years of age. The globe was the seat of melano-sarcoma. The sight of the eye had been destroyed by panophthalmitis eight years ago. The shrunken globe remained quiescent for five years. For the last three years it had been red and painful, and the patient also complained of headache. For the last three weeks he vomited, and the sight of the other eye began to fail. On examination with the ophthalmoscope, the optic nerve of this eye was found to be atrophic. The shrunken globe, which was very hard and permeated by large veins, was now enucleated. After division of the conjunctiva and the muscles, the globe did not protrude as usual, and, by introducing a finger, a tumor could be felt at the junction of the globe and the optic nerve. After excision, the eyeball was found to be filled with masses of melanosarcoma which had invaded the optic nerve and the chiasma, and thus caused atrophy of the other optic nerve, and finally death by implication of the brain. Sarcoma of the eyeball usually extended by way of the orbital fissures, and rarely by way of the nerve, as in this case. Fuchs had collected 259 cases of this growth, among which only ten proved fatal by direct extension to the brain, the remainder causing death by metastasis. One case similar to the one described by Dr. Gruening had been published by Dr. H. Kuapp.

PERFORATION OF THE INTESTINES IN TYPHOID FEVER.—Dr. II. J. BOLDT presented the intestines of a patient who had died from perforation in the course of typhoid fever. There had been no diarrhoea in the course of the disease.

Dr. A. JACOBI remarked that specimens of intestines from patients who had died of typhoid fever which had run its course without giving rise to diarrhoea had already been presented to the society on two previous occasions. Such cases could be frequently observed in this country.

Dr. G. LANGMANN said that they were not rare in Germany either, where they went by the designation *typhus ambulatorius*. Constipation could occur in typhoid fever in spite of the presence of ulcers in the intestinal tract.

CONGENITAL CYST OF THE NECK.—Dr. A. G. GERSTER presented a specimen of congenital cyst of the neck which had ad-

hered to the transverse process of the sixth cervical vertebra. Its removal was accomplished with some difficulty, as the large vessels of the neck had to be exposed and one branch of the internal jugular vein had to be ligated. The posterior wall of the cyst was found to be attached to the sterno-cleido-mastoid muscle by inflammatory adhesions, and therefore a portion of this muscle had to be removed, together with the tumor. An antiseptic dressing was applied. The patient had a fit of coughing, in consequence of which a copious hæmorrhage took place into the cavity of the wound. This was probably caused by the slipping of the catgut off the branch of the internal jugular vein which had been ligated. The coagulated mass did not decompose, but gradually shrunk and disappeared at the end of two weeks. The wound healed by first intention. If it had not been for the Lister dressing, the hæmorrhage would have given rise to disagreeable complications.

Dr. H. KNAPP remarked that after certain operations upon the eye very extensive hæmorrhage into the surrounding cellular tissue was apt to take place. Absorption always took place without any difficulty, though no antiseptic precautions were employed.

Dr. GERSTER replied that in the cases mentioned by Dr. Knapp the hæmorrhage was subcutaneous, and the blood did not come in contact with the air. It was different in cases like the one reported by him.

CESAREAN SECTION.—Dr. H. J. GARRIGUES presented the uterus and the kyphotic pelvis of a woman on whom he had performed the Cesarean section, for an account of which see the "New York Medical Journal" for January 27, 1883, p. 103.

A STATED meeting was held December 22, 1882, Dr. A. G. CAILLÉ, in the chair.

BLEPHAROPLASTY ACCORDING TO THE "ENGLISH METHOD."—Dr. E. GRUENING presented a patient upon whom he had performed blepharoplasty according to the "English method" two months ago with perfect success. The case will be found in the "New York Medical Journal" for July 28, 1883, p. 103.

INJURY OF THE BRAIN WITHOUT IMPAIRMENT OF ITS FUNCTION.—Dr. H. KNAPP presented a young man who, two years ago, had met with an accident caused by the premature explosion of a quantity of gunpowder. There was an enormous defect in the left side of the frontal bone, covered by cutaneous tissue. There were distinct cardiac and respiratory pulsations of the brain. There had been also loss of substance of the brain itself without impairment of its function.

Dr. A. JACOBI mentioned the case of a boy who had met with an accident ten years ago, which resulted in the loss of a considerable part of his skull. No brain substance was lost. The boy recovered.

Dr. J. RUDISCH stated that the patient presented by Dr. Knapp, upon being questioned, admitted that he had been very irritable since the accident happened to him. In the celebrated "American Crowbar Case" the loss of substance had also involved the frontal lobes, as in the present case, and no disturbance of either motility or sensibility ensued. The patient resumed work, but had to be discharged by his employers on account of an ungovernable temper which had developed after the accident. In experiments performed upon monkeys, no disturbances of either sensation or motility were produced by electric excitation or mechanical lesions of the frontal lobes.

STENOSIS OF THE AURICULO-VENTRICULAR OPENING.—Dr. J. KUCHER presented a specimen of congenital stenosis of the right auriculo-ventricular opening, and of a chorda tendinea stretched horizontally between the flaps of the mitral valve. The description of the specimen has been published elsewhere.

Dr. A. JACOBI held that the changes in the specimen pre-

sented were due to endocarditis, which had developed during the last months of pregnancy. This view he based upon the size of the heart, which was normal.

ACUTE NEPHRITIS IN AN INFANT.—Dr. CAILLÉ reported a case of acute nephritis in an infant only a few days old, and presented its urinary apparatus. The child was in a healthy condition when born, and had not been exposed to any injurious influences. For six days it progressed satisfactorily. On the seventh and eighth days it did not urinate, and refused the breast. Dr. Caillé first saw the infant on the tenth day. It was very weak. There was increased frequency of respiration, without any râles. The pulse was accelerated. The heart-sounds were normal. Pressure upon the region of the kidneys caused the child to moan. The bowels had been moved freely, but the bladder had been emptied only once in thirty-six hours. The color of the urine was greenish-brown. Dr. Caillé diagnosed renal colic caused probably by concretions. He ordered the child to be packed in warm flannel, and prescribed small doses of opium. On the eleventh day the child was much better, but on the twelfth a relapse took place and the little one succumbed. At the autopsy the renal portion of the peritonæum appeared dark red. There were numerous extravasations of blood in the areolar tissue surrounding both kidneys. The kidneys themselves were dark red and enlarged. Both ureters and the bladder were normal. The renal epithelia were enlarged and opaque. The other viscera were in a state of venous congestion. Dr. Caillé thought that acute nephritis occurred rarely in early infancy.

Dr. A. JACOBI supposed that the cause of the inflammation of the kidneys in this case had been concretions of uric acid.

Dr. BOLDT said that he had met with a similar case in a baby three months old, with this difference, however, that this baby recovered.

Dr. A. SEIBERT, who had assisted at the autopsy, said that there were numerous hæmorrhages in the liver as well as in its capsule. This circumstance had inadvertently been omitted by Dr. Caillé.

Dr. A. JACOBI said that such hæmorrhages were frequently met with in cases of fatty degeneration. He inquired whether there was any suspicion of hereditary syphilis.

Dr. CAILLÉ said that there was not.

AN IMPROVED MICROSCOPE SLIDE.—Dr. CAILLÉ also showed an improved slide for microscopical objects. It was well adapted for the prolonged observation of living animalcula. Such slides were made by the inventor, Gustav Weber, 265 Broome Street.

A NEW CURRENT SELECTOR.—Dr. GEORGE W. JACOBY showed a new current selector which had been devised by him in conjunction with Dr. Rudisch, and for which he claimed the following advantages:

1. It enabled the operator not only to increase or diminish the number of cells he wished to include in the circuit, but also to select the cells from any part of the battery he pleased. With the ordinary current selectors this was not possible. If one wished to use less than the entire number of cells, the same cells were made to work every time, and in this way one part of the battery was soon exhausted.

2. Good contact was secured by springs concealed in the riders.

3. Its construction was very simple, and it was therefore easily kept in good order.

TRACHEOTOMY IN DIPHTHERIA.—Dr. A. JACOBI related a case of diphtheria, occurring in a strong girl seven years old, in which he had performed tracheotomy two weeks ago. The operation was followed by marked relief, but the diphtheritic process continued to progress. The wound was soon found covered with a diphtheritic membrane, and the tissues were destroyed so rapidly

that soon the end of the thumb could be introduced into the aperture made in the trachea. The tube was nevertheless left in. The child was doing fairly well for two weeks; at the end of this time paralysis of the velum palati supervened, in consequence of which pneumonia developed, and the child died on the nineteenth day. This case shows that recovery should never be assumed to be established before the removal of the tube, since fatal complications might arise at any time.

Dr. BOLDT mentioned a case of diphtheria in which he had performed tracheotomy two years ago. In this case the tube had to be left in for about eighteen days. Paralysis of the vocal cords supervened in the course of the disease, but the child nevertheless recovered.

A discussion of the different methods of tracheotomy followed, in the course of which Dr. A. JACOBI stated that he preferred the infra-thyroid method, and that for many years he had used exclusively tubes made of hard rubber.

A. G. GERSTER, M. D., *Secretary.*

Miscellany.

THERAPEUTICAL NOTES.—*Extract of Doundaké Bark and its Alkaloid, Doundakine.*—M. Vulpian ("Union médicale," August 4, 1883) has reported to the French Academy of Sciences some interesting particulars concerning the bark of the doundaké and its alkaloid, doundakine. The doundaké is a shrub found on the west coast of Africa. Its bark, used empirically as a febrifuge by the natives about the Rio Nuñez, is of an orange-red color, and has a very bitter taste. It consists of superimposed layers that are easily separated from one another. An organic base may be isolated by the following process: The pulverized bark is boiled in water acidulated with sulphuric acid. The filtered liquid is treated with lime. The precipitate is placed upon a cloth, drained, and compressed. The dried mass is worked up in a wet bath with alcohol. The alcoholic solution, concentrated by distillation and afterward evaporated *in vacuo*, yields a substance which is to be purified by several successive evaporations. The product thus obtained is a yellow powder formed of rhombohedral crystals, visible by means of the microscope. It is bitter to the taste, soluble in water and in alcohol, and alkaline in reaction. Winkler's liquid precipitates from it phospho-tungstic and phospho-molybdic acids, but it does not become turbid on the addition of Bouehardat's reagent. It may be classed among the alkaloids under the name of doundakine. The bark of the doundaké does not yield salicin, as was supposed by Venturini.

Experiments performed for the purpose of determining the physiological action of the alcoholic extract of doundaké bark and of doundakine gave the following results: In the case of a frog, the hypodermic injection of a quantity of the extract representing two grammes of the bark caused death at the end of thirty-six hours. In the case of a young cobaye weighing 100 grammes (about a fifth of a pound), the extract from 1 gramme of the bark induced death in fifteen minutes. Eight milligrammes (gr. $\frac{1}{8}$) of doundakine, equivalent to about two grammes of the bark, killed a frog in twenty-six hours. Thirty-four milligrammes of the alkaloid, given hypodermically, killed a cobaye weighing 700 grammes (about $1\frac{1}{2}$ pound) in twenty-four hours.

The physiological action of the extract of the bark and that of the alkaloid are identical, and may be given in brief thus: In the case of the frog, some general weakness, accompanied with a diminution of spontaneous and reflex movements, was noticeable in from two to five minutes. Soon the animal was unable to maintain its normal attitude. It would keep indefinitely any position given it by the experimenter, no matter how unusual or odd. However, the muscular contractility and nervous excitability were preserved, and the pulsations of the heart were not sensibly affected. The foregoing phenomena, which take place in what the experimenter calls the "first period," were followed by the complete resolution of the "second period." The respiratory

movements became lessened in frequency, irregular, then intermittent, and then ceased altogether. The pulsations of the heart were retarded and afterward irregular. Reflex movements were abolished progressively. Finally the heart ceased to beat.

SPECIAL SURGICAL APPLIANCES FOR DISABLED SOLDIERS AND SAILORS.—We have received the following communication, dated August 28, 1883, from the Surgeon-General of the army:

"Congress having appropriated a small sum for furnishing special surgical appliances to those disabled in the military or naval service, your co-operation is respectfully invited in order that this relief may reach the class of persons intended to be benefited.

"This office is desirous of obtaining authentic information regarding all existing cases of severe and unusual injuries. Should you have occasion to report such, it will be found useful to bear in mind the following points:

"1. As no money commutation is authorized, only such cases need be presented as offer a fair prospect of being relieved by surgical or mechanical appliances.

"2. Artificial limbs and apparatus for disabled limbs being otherwise provided for by law, the injuries here in view are almost exclusively those affecting the head, face, or trunk.

"3. As trusses are furnished under special legislation, hernia, when not complicated with other injuries, is not to be understood as covered by this appropriation for *special* appliances.

"4. As the appropriation is small, it is proper that it be expended only on the most meritorious cases. It is therefore not intended to furnish appliances which are ordinarily within the means of the individual, nor those that are of a character so perishable that it would be difficult to keep up the supply. Regard is to be had chiefly to the severity of the injury, and the ability of the sufferer, unassisted, to procure relief."

THE BOSTON CITY HOSPITAL TRAINING SCHOOL FOR NURSES.—"The instruction includes: 1. The dressing of blisters, burns, sores, and wounds, and preparation and applying of fomentations, poultices, and minor dressings. 2. Cupping, leeching, and subsequent treatment. 3. The administering of enemata, and use of the female catheter. 4. The applying of friction to the body and extremities in the best method. 5. The management of helpless patients in bed, in moving, changing bed and body linen, giving baths, keeping patients warm or cool, preventing and dressing bed-sores, managing position, etc., and in feeding. 6. The making of bandages and rollers, preparation of splints, etc., and bandaging. 7. The making of beds and changing sheets, etc., with patients in bed. 8. The cooking, preparing, and serving of food and delicacies for the sick. They are also given some instruction in the best practical methods of supplying fresh air, warming and ventilating sick-rooms in a proper manner, and are taught to take proper care of rooms and wards; in keeping all utensils perfectly clean and disinfected, etc.; to observe the sick accurately in regard to the state of the secretions, expectorations, pulse, breathing, skin, temperature, eruptions, sleep, mental condition as to delirium, stupor, etc., condition of wounds, appetite, effect of diet or of stimulants and medicine, and the managing of convalescents.

"The instruction is given mainly by the Superintendent of the Training School and by the Head Nurses. Lectures, recitations, and demonstrations also take place at stated periods by the Hospital Staff and House Officers. Examinations, chiefly upon practical points, will take place from time to time. The pupils are employed as assistant nurses in the wards of the hospital, and are paid ten dollars (\$10) a month during the first year, and fourteen dollars (\$14) a month during the second year, for their clothing and personal expenses. This sum is in no wise intended as wages, it being considered that their education during this time is a full equivalent for their services. They are required to wear at all times, while on duty in the wards, the Training School uniform dress. When the full term of two years is completed, the nurses thus trained receive (after final examinations) diplomas certifying to the regular course of training, their knowledge of nursing, and their ability. The right is reserved to terminate the connection of any nurse or pupil with the school for any reason which may be deemed sufficient."

THE BREEDING OF CHOLERA GERMS.—Professor William B. Carpenter has written the following letter to the London "Daily News":

"Entirely agreeing with my friend Professor Tyndall in the doctrine that the human intestine is a breeding-ground for the germs of cholera, and that the conveyance of these germs by infected waters is a potent factor in the spread of that disease, I think it most dangerous to assume—what his language seems to me to imply—that the human intestine is the only breeding-ground for cholera germs, and the transmission of them by tainted water the chief (if not the only) mode of their diffusion. Having been throughout my professional life, from the first invasion of Asiatic cholera in 1831, a careful student of the conditions of its propagation (which I often discussed with my late friend, Dr. E. A. Parkes), I am perfectly satisfied that there are many cases which clearly indicate that cholera germs can also breed outside the living body in collections of decomposing organic matter, and can be thence diffused by the atmosphere—a doctrine which every one who is acquainted with the propagation and diffusion of putrefactive bacteria must regard as involving no inherent improbability. The epidemic of 1848-'49 supplied three very marked examples of this kind, which I was accustomed to bring before my class year after year when professor of forensic medicine and public hygiene in University College.

"One of these occurred in a suburb of Alnwick, in Northumberland, where almost every inhabitant of a certain row of cottages was smitten in one night with either cholera or choleraic diarrhoea. These cottages had gardens behind them, at the far end of which was a row of very filthy piggeries. This almost universal outbreak followed immediately upon a change in the direction of the wind, which came to blow directly over the piggeries to the cottages. The second case was essentially similar, but on a much larger scale. It occurred in the city poorhouse of Baltimore, which was situated out of the town, in what was believed to be a peculiarly salubrious locality. The municipal authorities of that city had taken very active and (as the event proved) very efficient measures for warding off the disease from its inhabitants. Though cholera was very severe in New York, Philadelphia, and Washington, only a few imported cases occurred in Baltimore itself. But in the poorhouse, containing about eight hundred persons, a most fearful outbreak suddenly occurred, the deaths being as many as thirty a day. The place had been carefully cleansed, there was no overcrowding, and the drainage was believed to be efficient. But a more careful examination disclosed the fact that the drains, instead of being conducted into a neighboring ravine down which a stream ran, ended in a piece of marshy ground, covered with rank grass, that lay between this ravine and the back of the poorhouse inclosure. And it was then noticed that the outbreak had immediately followed a change of wind which caused it to set over this marsh toward the back of the poorhouse. With this clew, the singular phenomena of the outbreak were at once found explicable. All the first cases occurred in the back rooms of the building, and the number and severity of them bore a most remarkable relation to the local conditions which made one part of it rather than another the recipient of the fatal germ-bearing air currents. The cause being thus detected, effectual measures were immediately taken to antagonize its action, and the plague was at once stayed.

"Professor Tyndall may recollect being present, some years ago, at Siou College, when I brought this case before an assembly of clergymen in an address on the 'Reign of Law,' and asked whether any of my hearers believed that, if all Baltimore had gone down on its knees for a week in penitence and prayer, without taking the human means dictated by the study of the 'laws' of their divine government, and of the consequences of the infraction of them, this favorable result would have been brought about. My third case, which was in some respects even more striking, was related to me by an old fellow-student, who had been in Mexico at the time when the cholera epidemic reached that country, and was residing in a town (whose name I forget) of about twenty thousand inhabitants, situated on a level plateau on a mountain side at a considerable elevation. He noticed that a large proportion of the earlier cases occurred along a particular line, and that the subsidence of the disease along this line was followed by a sudden outbreak of the like kind along another line at an angle with the first; and he further noticed that this second outbreak had been

immediately preceded by a change of wind. Strongly suspecting, therefore, that the choleraic miasmata must have been wafted along each line from a common focus, he ran the two lines together as a bee-hunter does, and found at their point of convergence an inclosed yard containing an enormous heap of filth. What doubt can be reasonably entertained that this heap had served as the nidus in which the cholera germs had propagated, and from which they had been atmospherically conveyed?

"In one important respect, however, the Baltimore case is yet more instructive, since all the evidence there pointed to an original atmospheric implantation of the disease germs in the miasmatic marsh in which they bred, and from which their multiplied progeny were wafted to the unfortunate inmates of the poorhouse; for there had not been, as in all the known instances of poisoning by water supply, any previous case within the building from which the primal germs could have been furnished, while the local conditions precluded the idea that the marsh could have been contaminated by any other direct human communication. In the light of these cases, to which many more might be added, I hold it to be at the same time unscientific and unsafe to limit the breeding-ground of cholera germs to the human intestine, and to affirm that they can neither propagate themselves in faecal or other decomposing organic matter outside the living body, nor be introduced into it otherwise than through the mouth. Professor Tyndall lays great stress on the analogy of typhoid, but he must be aware that some of our best authorities do not admit his exclusive doctrine, even in regard to that disease. And, even if that doctrine were conclusively established, it could not invalidate the evidence I have now adduced in proof of the atmospheric diffusion of cholera germs bred outside the human body; since, if I am not mistaken, there are no cases on record of sudden and simultaneous outbreaks of typhoid under conditions at all parallel."

THE COUVREUSE, OR MECHANICAL NURSE.—After two years' trial, says the "Lancet," the *couvreuse* has proved so decided a success that a brief description of this ingenious contrivance may be desirable. It was in 1878 that Dr. Taruier, when visiting the apparatus devised by M. Odile Martin for artificially hatching and rearing chickens at the Jardin d'Acclimatation, suggested that a similar method might be applied with advantage to infants, especially in cases of premature birth. Two years elapsed, however, before any attempt was made to carry out this proposal; but in the course of the year 1880 a *couvreuse* was made, and brought to the hospital of the Maternité. This is a plain wooden case or box, measuring about 2 ft. 8 in. by 2 ft. 4 in., and 2 ft. 4 in. in height. The box has a double covering, the space between being filled with sawdust to retain the heat, and is divided into two parts. The lower half contains a reservoir, which holds about sixty litres of water, and is fed by a patent boiler that stands outside the box, and is warmed by an oil lamp; or hot water may be used without recourse to the lamp. The upper portion of the box forms a warm chamber, where a little basket or cradle is placed, large enough to hold two infants. From an opening at the side, this cradle may be withdrawn, while the top of the box has a double glass covering, so that the children and the thermometer lying by their side can be constantly watched. If the water used in the first instance is cold, it takes a long time to attain the required temperature; but once this is done the lamp need only be relit three or four times during the course of the day. It is best to warm the apparatus while the infants are being fed or washed. The temperature within the *couvreuse* is generally maintained at 86° F., and, though the contrast on withdrawing the child to be fed or washed is very great, amounting often to 30° F., colds are not so frequent as among the infants nursed in the ordinary manner. Altogether the experiment is considered so successful that it is proposed to supply all the hospitals of France with a *couvreuse*, and there is every reason to anticipate good results from this measure. Nor is this all. A small portable *couvreuse* is now about to be tried which could be carried by hand from house to house. After this we shall probably have perambulators constructed on the same model. In conclusion, we should remark that, though no very careful experiments have been made with respect to the ventilation within the *couvreuse*, yet this is evidently sufficient. Apertures are made in the lower portion of the box, the

fresh air travels over the hot-water reservoir, and is thus warmed before it reaches the child. The very great difference of temperature within the *couvreuse* insures a constant current of air, though the child is protected by its cradle and clothes from any draught.

LOCALIZED BLENNORRHOEA IN THE FEMALE.—According to M. Boutin ("Thèse de Paris," Jan. 30, 1883):

1. Blennorrhagia in the female has a marked tendency to localization in certain well-determined points of the vulva or the vagina, either primarily, or when the inflammatory process has somewhat diminished.

2. Generally, blennorrhagia localizes itself in the glands of the genital apparatus.

3. Blennorrhagia may localize itself exclusively in the vulva. This constitutes *blennorrhagic vulvitis*.

4. But it may offer more intimate localizations and secrete itself within the *glands of Bartholin*, in the *peri-urethral follicles*, or in the *disseminate glands*, at the level of the labia minora or the fourchette.

5. *Blennorrhagic Bartholinitis* is quite frequent. It may present the following forms:

The acute form, terminating by resolution or induration, rarely by suppuration.

The subacute form, suppurating invariably, the blennorrhagic Bartholinitis then becoming complicated with a phlegmonous peri-Bartholinitis. The peri-glandular pus is not blennorrhagic, while the intra-glandular pus presents all the characters of blennorrhagic pus.

The chronic form. If the inflammation occupies the body of the gland, then there are chances of complications of peri-Bartholinitis and of contagion; while, if the inflammation be localized at the excretory duct, the chances are at the minimum. But the inflammation has a natural tendency to invade the body of the gland.

6. The peri-urethral folliculitis may be

Simple. It then presents well-defined clinical symptoms.

Hypertrophic. It then becomes the point of departure of urethral polypi.

Suppurating. In this last condition the disease is contagious. The contagion is effected by the introduction of a drop of blennorrhagic pus into the canal of the urethra, one of these follicular abscesses being broken during the act of coition.

7. Blennorrhagia rarely localizes itself in the glands of the labia minora or in the form of a patch in one or several vulvar glands situated at the level of the fourchette.

8. All the points of the localization of blennorrhagia may become exulcerated under the influence of inflammation, and thus become a point of entry for the chancreous or syphilitic virus.

9. Blennorrhagia may localize itself, when it occupies the vagina, in the cul-de-sac, in the folds which are observed on the mucous surface, in the uterine neck, or even in the cavity of the uterus itself. In the latter two cases it is frequently complicated with peri-uterine accidents, by the intermediary of a lymphangitis or of a juxta-uterine adenitis (adeno-lymphitis), which especially lead to adeno-pelvi-peritonitis.

10. It is rare that blennorrhagia localizes itself in the rectum; nevertheless, this fact has been observed, especially in the female.

11. It is important to recognize localized blennorrhagia in the female, and to not confound it with dermatoses, such as herpes or zona. Blennorrhagic Bartholinitis should be differentiated from traumatic Bartholinitis and cysts of the vulvo-vaginal glands.

Likewise it is important to distinguish peri-urethral folliculitis from inflammatory vegetations, and blennorrhagic vulvitis from simple vulvitis. Physicians ought also to be able to refer a blennorrhagic metritis to its true cause.

12. The prognosis should embrace two factors:

a. The patient is, by the fact of her localized blennorrhagia, subject to acute recurrences of a severe character.

b. She may become contagious, if any circumstance whatever should reawaken the chronic inflammation and induce the least possible puriform or purulent condition.

13. In order to radically cure the disease, it is necessary, after the subsidence of the acute symptoms, to modify the inflamed points by energetic cauterizations, to even incise the gland of Bartholini and

induce suppuration, if it should be the seat of localization of the blennorrhagia.—*Jour. of Cutan. and Venereal Dis.*

BATHING INFANTS IN THE SEA.—At the present season a mistaken and mischievous practice is much in vogue. Daily torture is inflicted on thousands of tender and helpless infants by forcibly plunging their bodies, in spite of shrieks and struggles, into the open sea. This cruel and time-honored process may now be seen in full operation at any sea-side resort. Affectionate mothers hand over their infants to stalwart and impassive bathing-women, to be plunged head foremost into the sea, under the absurd notion that the procedure vastly benefits the little ones. Day after day, with relentless regularity, very young children and babies are borne out amid the waves and subjected to their dreaded ducking, in the firm belief that their trembling bodies, often writhing to the verge of convulsions, are thus made healthy and hardy. All experience on the subject, and the teachings of all medical authorities on sea bathing, agree in support of the two following rules—namely, that a child under two years of age ought never, under any circumstances, to be bathed in the open sea, and that no one, child or adult, can enter the sea without danger while under the influence of emotional excitement. Under two years of age, a child's body is too weak to gain any benefit from the shock of immersion in the open sea. Its nervous and circulating forces are too feeble for the development of that vigorous reaction without which sea-bathing is either useless or hurtful. In the absence of strength for such reaction, a sea-bath tends to chill an infant's body, and predisposes to internal congestions. At any age, the shock of immersion in the sea brings risk of danger, and even of death, when the emotions are powerfully excited, and especially when the mind and body are dominated by that most depressing of human emotions—fear. Infants are not always bathed in the sea merely with the intention of making them strong. There is an old sea-side tradition that babies diligently bathed become fearless in the water when they grow up. This notion is also false. Than that infants gain courage by being plunged in the sea, it is more probable that many a nervous child has acquired a dread of bathing which no after-experience could remove, because it was compelled in fear and trembling to plunge under water. If a child be sufficiently robust to develop a good reaction, if it be over two years of age, and, above all, if it be not afraid, it may be bathed in the sea with advantage. If any of these conditions be wanting, sea-bathing for children is likely to be positively injurious.—*British Med. Jour.*

PYRETHRUM POWDER.—At a recent meeting of the Horticultural Society of Montgomery County, Ohio, it was stated that pyrethrum powder was so much adulterated by dealers that it was advisable for persons wishing to employ this insecticide to raise the herb for themselves, and that the Agricultural Bureau at Washington would furnish the seeds on application.

NAVAL INTELLIGENCE.—*Official List of Changes in the Medical Corps of the Navy during the week ending September 1, 1883.*—Surgeon T. C. Walton, detached from the Powhatan, and ordered to the Naval Academy. ——— Surgeon W. J. Simon, detached from the United States steamer Constellation, and, after completing temporary duty as member of a board at Annapolis, Md., to be placed on waiting orders. ——— Passed Assistant Surgeon W. A. McClurg, detached from the United States steamer Dale, and ordered to the Naval Academy. ——— Assistant Surgeon Oliver Diehl, detached from the United States steamer Constellation and ordered to the Naval Academy. ——— Passed Assistant Surgeon M. D. Jones, ordered to temporary duty at the Naval Hospital, Washington, D. C.

SOCIETY MEETINGS FOR THE COMING WEEK.—*Monday, September 10th.* New York Ophthalmological Society (private); New York Medicohistorical Society. *Tuesday, September 11th:* East River Medical Association (private); Jersey City Pathological Society; Newark Medical Association (private). *Wednesday, September 12th:* New York Pathological Society. *Thursday, September 13th:* Public Health Association of New York; Society of Medical Jurisprudence and State Medicine; Brooklyn Pathological Society. *Friday, September 14th:* Yorkville Medical Association (private).

STUDENTS' NUMBER.

THE MEDICAL COLLEGES OF THE UNITED STATES AND CANADA.

Herewith we give as much information as our space will allow concerning sixty-seven medical colleges of the United States and Canada. The list includes all the non-sectarian colleges recognized by the Illinois State Board of Health that we have been able to obtain trustworthy data from. The arrangement is by States, in alphabetical order, and the different colleges in individual States are mentioned in the order of their age. In many instances more particulars might have been given with advantage, but, as lack of space has precluded our following this course, we have been careful to give the names and addresses of the deans or other officers to whom application for further information may be made.

It will be seen that we have made no reference to courses of instruction for graduates, or to institutions wholly devoted to graduate courses. Those matters will receive full consideration in our College Commencement Number, to be issued in February. To that end, we now take the liberty of asking the proper officers of such schools to send us two copies of their announcements, together with such further information as may seem likely to be of interest to the profession. It affords us pleasure to acknowledge the kindness of college officials in providing us with data for this issue.

Alabama.

MEDICAL COLLEGE OF ALABAMA, MOBILE, ALA.

FACULTY.—F. A. ROSS, M. D., Materia Medica and Therapeutics (emeritus); E. P. GAINES, M. D., Physical Diagnosis and Diseases of the Chest; GEORGE A. KETCHUM, M. D., Theory and Practice of Medicine; E. H. FOURNIER, M. D., Materia Medica, Therapeutics, and Clinical Medicine; W. H. ANDERSON, M. D. (Dean), Physiology; J. F. HEUSTIS, M. D., Surgery; CHARLES MOHR, JR., Lecturer on Chemistry; GORONWY OWEN, M. D., Obstetrics and Diseases of Women and Children; CALEB TOXEY, M. D., Anatomy; W. H. SANDERS, M. D., Diseases of the Eye and Ear, and Histology; RHETT GOODE, M. D., Lecturer on Clinical and Minor Surgery; P. C. CANDIDUS, G. P., Lecturer on Practical Pharmacy; D. E. SMITH, M. D. (Adjunct), Surgery; E. W. AUZAL, M. D. (Adjunct), Physiology; W. B. PAPE, M. D. (Adjunct), Obstetrics, etc.; RHETT GOODE, M. D., Demonstrator of Anatomy; E. DICKSON, M. D., Assistant Demonstrator.

The twenty-fourth annual session will begin October 18, 1883, and will continue five months.

REQUIREMENTS FOR GRADUATION.—These embrace nothing peculiar.

FEES.—Matriculation, \$5; lectures, both at college and hospital, \$75; dissecting, \$10; graduation, \$25. All students are required to take the dissecting ticket.

The faculty has established a chair of pharmacy in connection with the college. The fees for the course will be: Matriculation, \$5; tickets, \$30; graduation, \$20. Two courses will be required for graduation. Regular medical students who desire to take the course can do so by paying for the ticket in practical pharmacy (\$10) and for the diploma.

For further information address W. H. Anderson, M. D., Dean, No. 70 St. Francis Street, Mobile, Ala.

Arkansas.

MEDICAL DEPARTMENT OF ARKANSAS INDUSTRIAL UNIVERSITY,

LITTLE ROCK, ARK.

FACULTY.—P. O. HOOPER, M. D. (President), Practice of Medicine; EDWIN BENTLEY, M. D., Institutes and Practice of Surgery; A. L. BREYSACHER, M. D., Obstetrics and Diseases of Women and Children; J. A. DIBRELL, JR., M. D., Anatomy; JOHN J. MCALMONT, M. D., Materia Medica, Therapeutics, Hygiene, and Botany; JAMES H. SOUTHALL, M. D., Institutes of Medicine; ROSCOE G. JENNINGS, M. D., Clinical Surgery and Dermatology; J. M. BUCHANAN, M. D., Medical Chemistry and Toxicology; L. P. GIBSON, M. D., Demonstrator of Anatomy; T. E. MURRELL, M. D., Ophthalmology and Otolaryngology; JAMES H. LENOW, M. D., Diseases of the Genito-Urinary Organs; CLAIBORNE WATKINS, M. D., Physical Diagnosis and Clinical Medicine; LOUIS R. STARK, M. D., Gynecology; JOHN WATERS, M. D., Clinical Medicine and Prosector of Anatomy; LOUIS AUGSPATH, D. D. S., Oral Surgery; W. U. SIMONS, U. S. Signal Service, Meteorology, etc.

The fifth annual course will begin October 3, 1883, and continue five months.

The requirements for graduation are the ordinary ones.

FEES.—Professors' tickets, \$50; matriculation, \$5; demonstrator's ticket, \$5; hospital ticket, \$3; graduation, \$25.

Address R. G. Jennings, M. D., Secretary, Little Rock, Ark.

California.

COOPER MEDICAL COLLEGE,

SAN FRANCISCO, CAL.

This college is the successor to the Medical College of the Pacific.

FACULTY.—HENRY GIBBONS, M. D., Principles and Practice of Medicine; L. C. LANE, M. D. (President), Surgery; C. N. ELLINWOOD, M. D., Physiology; ADOLPH BARKAN, M. D., Ophthalmology and Otolaryngology; J. H. WYTHE, M. D., Microscopy and Histology; HENRY GIBBONS, JR., M. D. (Dean), Obstetrics and Diseases of Women and Children; WILLIAM A. DOUGLASS, M. D., Clinical Surgery; J. O. HIRSCHFELDER, M. D., Clinical Medicine; CLINTON CUSHING, M. D., Gynecology; W. D. JOHNSTON, M. D., Chemistry and Toxicology; L. L. DORR, M. D., Materia Medica and Therapeutics; R. H. PLUMMER, M. D., Anatomy; JOHN F. MORSE, M. D. (Adjunct), Anatomy; W. S. WHITWELL, M. D. (Adjunct), Obstetrics; CHARLES E. FARNUM, M. D., Demonstrator of Anatomy.

The regular course begins in June of each year, and terminates in October. The intermediate course begins in January, and continues until the 1st of May.

REQUIREMENTS FOR GRADUATION.—Attendance on three regular courses and two courses of clinical instruction; dissection of the entire cadaver; the other ordinary requirements. The college will comply with the requirements of the Illinois State Board of Health.

FEES.—Matriculation, \$5; lectures, \$130; Demonstrator's ticket, \$10.

Further information may be obtained from Henry Gibbons, Jr., M. D., Dean, 101 Dupont Street, San Francisco, Cal.

Canada.

McGILL UNIVERSITY, FACULTY OF MEDICINE, MONTREAL.

THE following changes have been made in the teaching corps during the past year: Dr. James Stewart, of Brucefield, Ont., has succeeded Dr. Wright in the chair of materia medica and therapeutics; on the resignation of Dr. McCallum, the chair of obstetrics and diseases of women was divided, and Dr. A. A. Browne was made professor of obstetrics and Dr. William Gardner professor of gynecology; Dr. F. J. Shepherd, the former demonstrator of anatomy, succeeds the late Dr. Scott as professor of anatomy; the lectureship in ophthalmology has been made a professorship; Dr. George Wilkins has been appointed professor of medical jurisprudence; Dr. R. L. Macdonnell becomes demonstrator of anatomy, with Dr. William Sutherland and Dr. R. J. B. Howard as assistants; Dr. Wesley Mills has been made demonstrator of practical physiology.

The course is so arranged as to divide the primary and final branches of study equally. In the first two sessions the student works at botany (first year), anatomy, physiology, chemistry, and materia medica, and passes on these subjects. The third and fourth sessions are devoted entirely to final work. In the hospital the clinical classes are arranged into a junior (third) and senior (fourth) year, and the instruction is largely at the bedside. The most important feature of the teaching is the system of case-taking by the students, who examine the patient before the class and have their reports verified or corrected. Systematic practical instruction in gynecology is given to fourth-year students at the University Dispensary in groups of two or three daily. Though attendance at only six cases of labor is necessary to qualify for examination, the majority of the candidates are able to present certificates of attendance upon from fifteen to twenty cases at the lying-in hospital. A practical course in obstetric operations is also given.

Special clinical instruction is given in ophthalmology, laryngology, diseases of children, and diseases of the skin. The post-mortems are performed by the senior students in rotation. None of the foregoing are extra courses, but all are embraced in the general instruction of the senior students. In this way a man devoting two years to the study of the practical branches of medicine gets a very fair knowledge of his profession, and, if diligent, may become

familiar with the more essential features of the special departments.

During the year the faculty has raised an endowment of \$100,000, the interest of which will be used in extending the practical teaching of the school.

FACULTY.—JOHN WILLIAM DAWSON, LL. D., F. R. S. (Principal), Natural History; WILLIAM WRIGHT, M. D., Materia Medica and Therapeutics (emeritus); DUNCAN C. MCCALLUM, M. D., Midwifery and Diseases of Women (emeritus); ROBERT CRAIK, M. D. (treasurer), Chemistry (emeritus); JOSEPH MORLEY DRAKE, M. D., Institutes of Medicine (emeritus); R. PALMER HOWARD, M. D. (dean), Medicine; G. E. FENWICK, M. D., Surgery; G. P. GIRDWOOD, M. D., Chemistry; GEORGE ROSS, M. A., M. D., Clinical Medicine; WILLIAM OSLER, M. D. (registrar), Professor of the Institutes of Medicine; THOMAS G. RODDICK, M. D., Clinical Surgery; WILLIAM GARDNER, M. D., Gynecology; FRANCIS J. SHEPHERD, M. D., Anatomy; FRANK BULLER, M. D., Ophthalmology and Otolaryngology; ARTHUR A. BROWNE, B. A., M. D., Midwifery and Diseases of Infancy; JAMES STEWART, M. D., Materia Medica and Therapeutics; GEORGE WILKINS, M. D., Medical Jurisprudence; D. P. PENHALLOW, B. Sc., Botany; R. L. MACDONNELL, B. A., M. D., Demonstrator of Anatomy and Lecturer on Hygiene; WILLIAM R. SUTHERLAND, M. D., Assistant Demonstrator and Curator; GEORGE W. MAJOR, B. A., M. D., Instructor in Laryngology; ALEXANDER D. BLACKADER, B. A., M. D., Instructor in Diseases of Children; T. WESLEY MILLS, M. A., M. D., Demonstrator of Practical Physiology and Histology; ROBERT J. B. HOWARD, B. A., M. D., Assistant Demonstrator of Anatomy.

The fifty-first annual session opens Monday, October 1, 1883, and lasts six months. Students from the United States must pass the university matriculation examination (English Language; English History; Modern Geography; Latin, including Translation from the original and Grammar; Elements of Mathematics, comprising [a] Arithmetic, including Vulgar and Decimal Fractions; [b] Algebra, including Simple Equations; [c] Geometry, including the first two books of Euclid or the subjects thereof; Elementary Mechanics of Solids and Fluids; one of the following optional subjects: Greek, French, German, Italian, or some other modern language, Logic, Botany, Elementary Chemistry), unless they have already passed the matriculation examination of a recognized university.

REQUIREMENTS FOR GRADUATION.—Attendance on four six months' sessions in this or some other recognized school, or four years' study, including three such courses; eighteen months of attendance at a hospital approved of by the university; six months' practice in pharmacy; three months' attendance at an approved lying-in hospital, including the care of six cases of labor. The other requirements are substantially the same as in the larger colleges of the United States.

FEES.—First year, \$79; second year, \$92; third year, \$75; fourth year, \$65; hospital fees, \$28; graduation, \$30; university matriculation, \$5.

This college has signified its intention of conforming to the requirements of the Illinois State Board of Health.

For further information address Dr. William Osler, Registrar of the Faculty, 1353 St. Catherine Street, Montreal.

TORONTO SCHOOL OF MEDICINE.

FACULTY.—W. T. AIKINS, M. D., LL. D., Principles and Practice of Surgery and Clinical Surgery; H. H. WRIGHT, M. D., L. C. P. & S., U. C. (Secretary), Principles and Practice of Medicine and Clinical Medicine; J. H. RICHARDSON, M. D., M. R. C. S. Eng., Descriptive Anatomy; UZZIEL OGDEN, M. D., Midwifery and Diseases of Women and Children; JAMES THORBURN, M. D., Edin. and Toronto Univ., Materia Medica and Therapeutics; M. BARRETT, M. D., Physiology; W. W. OGDEN, M. B., Midwifery (adjunct) and Medical Jurisprudence and Toxicology; M. H. AIKINS, M. B., M. R. C. S. Eng., Surgery (adjunct) and Primary Anatomy; W. OLDRIGHT, M. D., Medical Jurisprudence (adjunct) and Sanitary Science; L. McFARLANE, M. B., Anatomy (adjunct) and Demonstrator of Anatomy; GEORGE WRIGHT, M. B., Materia Medica and Therapeutics (adjunct); J. E. GRAHAM, M. D., L. R. C. P. Lond., Practice of Medicine (adjunct) and Clinical Medicine and Dermatology and Pathology; R. A. REEVE, M. D., Diseases of the Eye and Ear; THOMAS HEYS, Chemistry; HENRY MONTGOMERY, B. Sc., Botany and Zoology; A. H. WRIGHT, M. B., M. R. C. S. Eng., Demonstrator of Normal Histology; JOHN FERGUSON, M. B., L. F. P. S. Glasgow, Assistant Demonstrator of Anatomy.

The forty-first session opens Monday, October 1, 1883, and lasts until April 1, 1884.

The requirements for graduation and the fees do not differ materially from those of the Royal College of Physicians and Surgeons at Kingston, although there are many minor points of difference, which we have not space to specify. The school will conform to the requirements of the Illinois State Board of Health. Address Dr. H. H. Wright, Secretary, corner of Sherbourne and Gerrard Streets, Toronto.

ROYAL COLLEGE OF PHYSICIANS AND SURGEONS,

KINGSTON, CANADA.

FACULTY.—FIFE FOWLER, M. D., L. R. C. S. Edin. (President), Theory and Practice of Medicine; MICHAEL LAVELL, M. D. (Registrar), Obstetrics and Gynaecology; MICHAEL SULLIVAN, M. D., Principles of Practice and Surgery; ALFRED S. OLIVER, M. D., Materia Medica, Therapeutics, and Pharmacy; THOMAS R. DUPUIS, M. D., F. R. C. P. S., K., and M. R. C. S. Eng., Descriptive Anatomy; THE PROFESSORS OF CHEMISTRY AND BOTANY IN QUEEN'S UNIVERSITY, Chemistry, Practical Chemistry, and Botany; KENNETH N. FENWICK, M. D., M. R. C. S. E., Institutes of Medicine; CHAMBERLEN A. IRWIN, M. D., Medical Jurisprudence; C. H. LAVELLE, M. D., L. R. C. P. S. K., Ophthalmic and Aural Surgery and Practical Anatomy; H. J. SAUNDERS, M. D., M. R. C. S. E., Clinical Surgery; JAMES McCAMMON, M. D., M. R. C. S. E., Clinical Medicine; W. H. HENDERSON, M. D., M. R. C. S. E., Histology; ———, Sanitary Science;

JOHN HERALD, M. A., and EDGAR FORRESTER, M. A., Associate Demonstrators of Anatomy.

The thirtieth session begins the first Wednesday in October, and lasts six months.

REQUIREMENTS FOR GRADUATION.—All but graduates or matriculates of a recognized university, and matriculates of the Medical Council of Ontario, must pass the matriculation examination of Queen's College. Candidates must have studied medicine four years, including three years at college; they must have attended twenty-five lectures in microscopic anatomy and sanitary science, one course of three months in practical chemistry and botany, two courses of three months in clinical surgery, clinical medicine, and medical jurisprudence, and two courses of six months in the other branches, besides eighteen months of hospital practice. A practical experience in pharmacy and in midwifery also is required. There are three examinations at different periods.

FEES.—Registration, \$5; the different courses, \$4 to \$12; each examination, \$10.

The college will comply with the requirements of the Illinois State Board of Health.

HALIFAX MEDICAL COLLEGE,

HALIFAX, N. S.

FACULTY.—R. S. BLACK, M. D., L. R. C. S. Edin. (President), Obstetrics (emeritus); ALEX. P. REID, M. D. (Dean), L. R. C. S. Edin., L. C. P. & S. Canada; ARCHIBALD LAWSON, M. D., M. R. C. S. England, Principles and Practice of Medicine and Clinical Medicine; WM. B. SLAYTER, M. D., M. R. C. S. L., F. O. S. London, L. R. C. P. England, Obstetrics and Diseases of Women and Children; EDWARD FARRELL, M. D., Principles and Practice of Surgery and Clinical Surgery; JOHN F. BLACK, M. D., Materia Medica and Therapeutics and Clinical Surgery; JOHN SOMERS, M. D., F. R. M. S., Physiology; GEORGE L. SINCLAIR, M. D. New York, M. D. Univ. Halifax, Anatomy; D. A. CAMPBELL, M. D., C. M. (Adjunct), Anatomy; H. McD. HENRY, LL.B., Medical Jurisprudence.

Lecturers.—E. JENNINGS, M. D., Dermatology; T. R. ALMON, M. D., Diseases of Children; D. DEW. HARRINGTON, M. D., Medical Jurisprudence; W. TOBIN, F. R. C. S. Ireland, Ophthalmology and Otology.

Instructors.—Mr. W. H. WADDELL, Practical Chemistry; A. W. H. LINDSAY, M. D., M. B. Edin., Microscopy; C. E. PUTTNER, Ph. M., Practical Pharmacy; Dr. CAMPBELL and Dr. LINDSAY, Demonstrators of Anatomy.

The seventeenth session will begin October 25, 1883. The regular order of lectures will begin October 29th, and will be continued six months.

The matriculation examination demanded is that of the Provincial Medical Board, and the following extracts from the "Nova Scotia Medical Act" are published for the information of students:

"7. Hereafter no person shall begin or enter upon the study of physic, surgery, or midwifery, for the purpose of qualifying himself to practice the same in this province, unless he shall have obtained from the Provincial Medical

Board a certificate showing that he has satisfactorily passed a matriculation or preliminary examination in the subjects specified in Schedule B of this act.

"8. No candidate shall be admitted to such matriculation or preliminary examination unless he shall have, at least fourteen days previous to such examination, given notice to the registrar of the Provincial Medical Board of his intention to present himself for such examination, and transmitted to the registrar a certificate showing that he has completed his sixteenth year, and shall, before the examination, have paid a fee of \$5 to the registrar."

REQUIREMENTS FOR GRADUATION.—Four years' attendance at lectures, including two six months' courses in anatomy, chemistry, materia medica, physiology, principles and practice of surgery, obstetrics and diseases of women and children, principles and practice of medicine, practical anatomy, clinical medicine, and clinical surgery, and one three months' course in practical pharmacy, medical jurisprudence, botany, and practical chemistry; twelve months' attendance at an approved hospital; three months' practice in dispensing; six months' attendance at a lying-in hospital; a certificate from a registered practitioner of proficiency in the practice of vaccination. Besides the general oral and written examination, candidates are examined at the bedside. The general examination in the elementary branches takes place at the close of the second year, and in the other branches at the close of the fourth year.

FEES.—Medical jurisprudence, practical chemistry, practical pharmacy, microscopy, and botany tickets, \$6 each; practical anatomy ticket, \$8; other tickets, \$12 each; registration, \$2 (perpetual, \$5). Address F. J. Black, M. D., Registrar, 49 Granville Street, Halifax, N. S.

FACULTY OF MEDICINE, UNIVERSITY OF BISHOP'S COLLEGE, MONTREAL.

FACULTY.—F. W. CAMPBELL, M. D., L. R. C. P. Lond. (Dean), Principles and Practice of Medicine; J. B. EDWARDS, Ph. D., D. C. L., Practical Chemistry (emeritus); R. A. KENNEDY, M. D., C. M. (Registrar), Obstetrics and Diseases of Children; J. PERRIGO, M. D., C. M., M. R. C. S. Eng., Surgery; J. B. MCCONNELL, M. D., C. M., Materia Medica; CASEY A. WOOD, C. M., M. D., Pathology; GEORGE E. ARMSTRONG, M. D., Physiology; JAMES C. CAMERON, M. D., C. M., M. R. C. P. I., Medical Jurisprudence; THOMAS SIMPSON, M. D., Hygiene; E. H. TRENHOLME, M. D., C. M., B. C. L., Gynaecology; WILLIAM YOUNG, C. M., M. D., Chemistry; J. LESLIE FOLEY, C. M., M. D., L. R. C. P. Lond., Anatomy; H. L. REDDY, M. D., L. R. C. S. E., L. R. C. P. L., Therapeutics; A. LAPHORN SMITH, M. D., M. R. C. S. Eng., Botany; JOSEPH BEMROSE, F. C. S., Lecturer on Practical Chemistry; ALEXANDER PROUDFOOT, M. D., C. M., Lecturer on Diseases of the Eye, Ear, and Throat; D. D. GAHERTY, C. M., M. D., Demonstrator of Anatomy; ANTHONY KERRY, C. M., M. D., Curator.

The thirteenth session begins Tuesday, October 2, 1883, and continues until the end of March, 1884. A preliminary examination is required. Attendance on three sessions is

obligatory, namely: *First session.*—Materia medica, botany, anatomy, physiology, chemistry, obstetrics, surgery, dissections, hospital practice. *Second session.*—Anatomy, physiology, chemistry, materia medica, therapeutics, medicine, gynaecology, hygiene, practical chemistry, practical histology, dissections, hospital practice, clinical lectures. *Third session.*—Medicine, surgery, pathology, obstetrics, gynaecology, therapeutics, medical jurisprudence, hospital practice, clinical lectures. Four years are advised, namely: *First year.*—Materia medica, botany, anatomy, physiology, chemistry, practical anatomy, hospital practice. *Second year.*—Anatomy, physiology, materia medica, therapeutics, hygiene, chemistry, practical chemistry, practical histology, surgery, gynaecology, obstetrics, dissection, hospital practice, clinics. *Third year.*—Anatomy, therapeutics, physiology, medicine, medical jurisprudence, dissection, hospital practice, clinics. *Fourth year.*—Medicine, surgery, pathology, obstetrics, gynaecology, medical jurisprudence, hospital practice, clinical lectures.

REQUIREMENTS FOR GRADUATION.—Four years' study, including three courses of lectures. The examinations are oral and in writing. In the elementary branches students may be examined at the end of the second year, and in botany at the end of the first year.

FEES.—Separate tickets, \$6 and \$12; practical chemistry, \$12; practical anatomy, \$6; practical histology, \$16; enregistration, \$2; hospital tickets and clinical lectures, \$8 to \$12. The foregoing are for one course. Graduation, \$20.

This college will comply with the requirements of the Illinois State Board of Health. For further information address Dr. F. W. Campbell, Dean, 10 Phillips Place, Beaver Hall.

TRINITY MEDICAL SCHOOL, TORONTO.

FACULTY.—WALTER B. GEIKIE, M. D., C. M., F. R. C. S. E., L. R. C. P. Lond. (Dean), Principles and Practice of Medicine, and Clinical Medicine; J. FULTON, M. D., C. M., M. R. C. S. Eng., L. R. C. P. Lond., Principles and Practice of Surgery and Clinical Surgery; J. E. KENNEDY, M. D., Materia Medica and Therapeutics; H. ROBERTSON, M. B., M. R. C. S. Eng., Anatomy; J. ALGERNON TEMPLE, M. D., C. M., M. R. C. S. Eng., Obstetrics and Diseases of Women and Children; THOMAS KIRKLAND, General Chemistry and Botany; C. W. COVERNTON, M. D., C. M., M. R. C. S. Eng., Sanitary Science; JOHN FRASER, M. D., L. R. C. P. Lond., L. R. C. S., Edin.; Demonstrator of Anatomy; FRED. LE M. GRASETT, M. B., C. M. Edin. Univ., F. R. C. S. Eng., M. R. C. S. Eng., Medical Jurisprudence; W. T. STUART, M. D., C. M., Practical Chemistry; CHARLES SHEARD, M. D., C. M., M. R. C. S., Eng., Physiology and Histology, Normal and Pathological; GEORGE S. RYERSON, M. D., L. R. C. P., L. R. C. S., Eng., Ophthalmology, Otology, and Laryngology; LUKE TESKEY, M. D., C. M., M. R. C. S. Eng., Assistant Demonstrator of Anatomy.

The winter session begins Tuesday, October 2d, and continues six months.

The requirements, etc., do not differ essentially from those of the other Canadian colleges. The school will con-

form to the requirements of the Illinois State Board of Health. Address Dr. Walter B. Geikie, Dean, 324 Jarvis Street, Toronto.

Colorado.

MEDICAL DEPARTMENT OF THE UNIVERSITY OF DENVER.

PROFESSOR SHORT (chemistry) and Professor MacDonald (physiology) have resigned, and their chairs have been filled, respectively, by W. P. Headden, Ph. D., and J. H. Kimball, M. D. A lecturer on laryngoscopy and rhinoscopy has been added.

FACULTY.—H. K. STEELE, M. D. (Dean), Principles and Practice of Surgery and Clinical Surgery; F. J. BANCROFT, M. D., Clinical Surgery—Fractures and Dislocations; J. C. DAVIS, M. D., Operative Surgery and Surgical Pathology; H. A. LEMEN, M. D., Principles and Practice of Medicine and Clinical Medicine; C. M. PARKER, M. D., Clinical Medicine—Fevers and General Diseases; W. H. WILLIAMS, M. D., Diseases of Women and Children; A. STEDMAN, M. D., Obstetrics and Puerperal Diseases; CHARLES DENISON, M. D., Diseases of the Chest and Climatology; W. R. WHITEHEAD, M. D., Anatomy; W. E. WILSON, M. D., Materia Medica and Therapeutics; J. H. KIMBALL, M. D. (Secretary), Physiology and Diseases of the Mind and Nervous System; J. W. GRAHAM, M. D., Medical Jurisprudence; W. P. HEADDEN, Ph. D., Chemistry; E. C. RIVERS, M. D., Lecturer on Ophthalmology; H. H. HOWLAND, M. D., Lecturer on Laryngoscopy and Rhinoscopy; P. V. CARLIN, M. D., Demonstrator of Anatomy.

The third annual session will begin October 2, 1883, and will close on the last Wednesday in March, 1884.

Applicants for admission are expected to pass a thorough examination in English composition, writing, grammar, arithmetic, natural philosophy, and rudiments of Latin; but all applicants holding the degree of A. B., or a diploma from any high school, or a certificate of proficiency in the above-named branches, from a reputable teacher of such school, shall be considered sufficiently prepared.

REQUIREMENTS FOR GRADUATION.—Besides the usual requirements, practical anatomy and chemistry during two sessions.

FEES.—Matriculation, \$5; lecture course, \$75; laboratory fees, \$10; dissection, \$5; graduation, \$30.

The college complies with the requirements of the Illinois State Board of Health. Address Professor H. K. Steele, Dean, Denver, Col.

Connecticut.

MEDICAL DEPARTMENT OF YALE COLLEGE, NEW HAVEN, CONN.

THE only noteworthy changes in the faculty during the year have been the transfer of Professor Lindsley to the chair of practice, in place of the late Professor Wilcox, and the appointment of Dr. T. H. Russell to the chair of materia medica, etc., made vacant by the transfer.

FACULTY.—BENJAMIN SILLIMAN, M. D., Chemistry; MOSES C. WHITE, M. D., Pathology; C. A. LINDSLEY, M. D., (Dean), Theory and Practice of Medicine; LEONARD J. SANFORD, M. D., Anatomy; WILLIAM H. CARMALT, M. D., Surgery; JAMES K. THACHER, M. D., Physiology; T. H. RUSSELL, M. D., Materia Medica and Therapeutics; FRANK E. BECKWITH, M. D., Obstetrics and Diseases of Women and Children.

Lecturers.—WILLIAM O. AYRES, M. D., Nervous Diseases; HENRY P. STEARNS, M. D., Insanity; S. HARTWELL CHAPMAN, M. D., Diseases of the Throat and Ear; SAMUEL B. ST. JOHN, M. D., Ophthalmology; WILLIAM H. HOTCHKISS, M. D., Demonstrator of Anatomy; T. MITCHELL PRUDEN, M. D., Normal Histology; HENRY FLEISCHNER, M. D., Dermatology; HERBERT E. SMITH, M. D., Chemistry.

The first term of the seventy-first annual session begins October 4th, and closes December 19th; the second term begins January 10, 1884, and ends April 3d; the third term lasts from April 11th to June 26th.

The system of instruction embraces a three years' graded course. A preliminary examination is required of those who have not a degree in letters or science from a recognized institution, or have not passed the examination for admission to Yale College. The next preliminary examination will be held October 3d. The gradation of studies is as follows: *First year*, chemistry, anatomy, histology; *second year*, anatomy, physiology, materia medica and therapeutics, practice of medicine, clinical medicine, obstetrics, surgery, and clinical surgery; *third year*, pathology, theory and practice of medicine, physical diagnosis, clinical medicine, surgery, clinical surgery, obstetrics, diseases of women and children, ophthalmology, medical jurisprudence, insanity, diseases of the throat and ear, nervous diseases, venereal diseases, diseases of the skin.

REQUIREMENTS FOR GRADUATION.—At least one continuous year at the school and an examination in all the studies of the three years' course. No Thesis is required. Examinations at the close of each year.

FEES.—Matriculation, \$5; each year's tuition, \$125; graduation, \$30.

The school complies with the requirements of the Illinois State Board of Health. Address Professor C. A. Lindsley, Dean.

District of Columbia.

NATIONAL MEDICAL COLLEGE (MEDICAL DEPARTMENT OF COLUMBIAN UNIVERSITY), WASHINGTON.

FACULTY.—A. Y. P. GARNETT, M. D. (President), Clinical Medicine (emeritus); GRAFTON TYLER, M. D., Theory and Practice of Medicine (emeritus); N. S. LINCOLN, M. D., Surgery (emeritus); J. FORD THOMPSON, M. D., Surgery; W. W. JOHNSTON, M. D., Theory and Practice of Medicine; A. F. A. KING, M. D. (Dean), Obstetrics and the Diseases of Women and Children; EDWARD T. FRISTOE, LL. D., Chemistry and Toxicology; WILLIAM LEE, M. D., Physiology; ELLIOTT COUES, M. D., Ph. D., Anatomy; D. WEBSTER PRENTISS, M. D., Materia Medica and Therapeutics;

JOHN B. HAMILTON,* M. D., Lecturer on Surgery; A. C. ADAMS, M. D., Demonstrator of Anatomy; G. N. ACKER, M. D., Demonstrator of Practical Physiology and Pathological Histology; LÉON L. FRIEDRICH, M. D., Assistant Demonstrator of Anatomy and Prosector in Anatomy; W. P. LAWVER, M. D., Demonstrator of Practical Chemistry.

The sixty-second course will begin October 1, 1883, and continue until March 1, 1884.

REQUIREMENTS FOR GRADUATION.—Candidates must have attended three courses of lectures, the subjects to be arranged as follows: *First course*, anatomy, physiology, chemistry, materia medica, practical anatomy, and histology; *second course*, anatomy, physiology, chemistry, materia medica, practice of medicine, surgery, and obstetrics, histology, practical anatomy, clinics (examination at the end of second course in anatomy, physiology, chemistry, and materia medica); *third course*, practice of medicine, surgery, obstetrics, pathological histology, clinical medicine, and surgery (final examination at the end of this course). Dissection of "two parts." The other requirements as usual.

FEES.—Full course of lectures, \$100; single tickets, \$15; practical anatomy, \$10; matriculation, \$5; examination fee, primary branches, \$20; examination fee, final branches, \$10.

Address A. F. A. King, M. D., Dean, 726 Thirteenth Street, Washington, D. C.

MEDICAL DEPARTMENT OF THE UNIVERSITY OF GEORGETOWN, D. C.

THE following changes have taken place in the corps of professors: Emeritus Professor Noble Young, M. D. (President), Principles and Practice of Medicine, and Professor F. A. Ashford, M. D., Surgery, and Dean and Treasurer, have been removed by death. J. W. H. Lovejoy, M. D., has been appointed to the chair of Theory and Practice of Medicine, and also made Dean and Treasurer. J. S. Beale, M. D., has been appointed to the chair of Surgery, and Frank Baker, M. D., succeeds the latter in the chair of Anatomy. Joseph Taber Johnson, M. D., has been elected President of the Faculty. G. L. Magruder, M. D., has been appointed to the chair of Materia Medica and Therapeutics, and Louis Kolipinski, M. D., has been made Demonstrator of Anatomy.

The titles of the lectureships held by Dr. S. M. Burnett and Dr. E. C. Morgan have been changed, and they are now termed, respectively, Clinical Professor of Ophthalmology and Otology, and Clinical Professor of Laryngology.

FACULTY.—FLODOARDO HOWARD, M. D. (emeritus), Obstetrics and Diseases of Women and Infants; JOHNSON ELIOT, M. D. (emeritus), Surgery and Clinical Surgery; JAMES E. MORGAN, M. D. (emeritus), Materia Medica, Therapeutics, and Medical Jurisprudence; THOMAS ANTISELL, M. D. (emeritus), Chemistry and Toxicology; SAMUEL C.

BUSEY, M. D. (emeritus), Theory and Practice of Medicine and Clinical Medicine; JOSEPH TABER JOHNSON, M. D. (president), Obstetrics and Diseases of Women and Infants; CARL H. A. KLEINSCHMIDT, M. D., Physiology; JAMES S. BEALE, M. D., Surgery; J. W. H. LOVEJOY, M. D. (Dean), Theory and Practice of Medicine; M. G. ELLZEY, M. D., Chemistry and Toxicology; FRANK BAKER, M. D., Anatomy; G. L. MAGRUDER, M. D., Materia Medica and Therapeutics; SWAN M. BURNETT, M. D., Ophthalmology and Otology (clinical); ETHELBERT C. MORGAN, M. D., Laryngology (clinical); THOMAS E. McARDLE, M. D., Lecturer on Venereal Diseases; SAMUEL S. ADAMS, M. D., Lecturer on Diseases of Children; LOUIS KOLIPINSKI, M. D., Demonstrator of Anatomy.

The regular course began Monday, September 3, 1883, and will continue until May 1, 1884. Lectures are delivered daily, beginning at 5.30 p. m., in order to accommodate those who are employed in governmental departments.

REQUIREMENTS FOR GRADUATION.—In addition to the usual requirements, two courses of practical anatomy and two courses of clinical instruction.

FEES.—Lectures, \$100; matriculation, \$5; demonstrator, \$10.

No graduation fee is required of students who have paid for three courses in this college, but \$30 will be charged to those credited courses in other schools. Single tickets, \$15.

For further information apply to J. W. H. Lovejoy, M. D., Dean, No. 900 Twelfth Street, N. W., Washington, D. C.

MEDICAL DEPARTMENT OF HOWARD UNIVERSITY, WASHINGTON.

FACULTY.—THOMAS B. HOOD, M. D. (Dean), Principles and Practice of Medicine; CHARLES B. PURVIS, M. D. (Secretary), Obstetrics and Diseases of Women and Children; NIEL F. GRAHAM, M. D., Principles and Practice of Surgery; DANIEL S. LAMB, M. D., Descriptive and Surgical Anatomy; WILLIAM H. SEAMAN, M. D., Chemistry; JOHN E. BRACKETT, M. D., Materia Medica and Therapeutics; ROBERT REYBURN, M. D., Physiology and Medical Jurisprudence; N. WHITCOMB, D. D. S., Dental Surgery and Operative Dentistry; ———, D. D. S., Dental Mechanism and Metallurgy; CLARENCE R. DUFOUR, Ph. D., Pharmacy and Botany; E. A. BALLOCH, M. D., Demonstrator of Anatomy; M. G. JENISON, M. D., D. D. S., Demonstrator in Dentistry.

The sixteenth annual session will begin October 1, 1883, and continue five months.

Applicants for admission must pass an examination in the ordinary English branches and possess a sufficient knowledge of the Latin language to read and write prescriptions and understand medical terms. This college is open to all without regard to sex or race.

REQUIREMENTS FOR GRADUATION.—Applicants shall have attended *three* courses of lectures at some regular medical college, the last at this school; shall have complied with the regulations of the school in regard to clinical lectures,

* During the absence of Professor Thompson in Europe, Dr. John B. Hamilton, Surgeon-General Marine-Hospital Service, will deliver the lectures on surgery.

dissections, etc.; shall pass the required examinations, and present an acceptable dissertation upon some subject of *original observation*.

FEES.—Matriculation, \$10; dissection, \$5; incidental expenses, \$20; graduation, \$30.

The school complies with the requirements of the Illinois State Board of Health. Address Charles B. Purvis, M. D., Secretary, No. 1118 Thirteenth Street, N. W., Washington, D. C.

Georgia.

ATLANTA MEDICAL COLLEGE,

ATLANTA, GA.

FACULTY.—A. W. GRIGGS, M. D., Practice (emeritus); W. F. WESTMORELAND, M. D., Principles and Practice of Surgery; WM. ABRAM LOVE, M. D., Physiology; V. H. TALIAFERRO, M. D., Obstetrics and Diseases of Women and Children; A. W. CALHOUN, M. D., Diseases of the Eye, Ear, and Throat; J. H. LOGAN, M. D., Chemistry; H. V. M. MILLER, M. D., LL. D. (Dean), Principles and Practice of Medicine, Lecturer on Clinical Medicine; W. S. ARMSTRONG, M. D., Anatomy, Lecturer on Clinical Medicine; J. S. TODD, M. D., Materia Medica and Therapeutics, Lecturer on Clinical Medicine; JAMES A. GRAY, M. D. (Proctor), Lecturer on Venereal Diseases; D. H. HOWELL, M. D., Lecturer on Minor Surgery; C. F. BENSON, JR., M. D., Demonstrator of Anatomy; R. O. COTTER, M. D., Assistant in Eye, Ear, and Throat Diseases.

The twenty-sixth annual course of lectures will begin on the 11th of October, 1883, and close on the 1st of March, 1884.

This is the opening of the regular session. Owing to the lengthening of the course of lectures, the preliminary course has been dispensed with.

REQUIREMENTS FOR GRADUATION.—Not peculiar.

FEES.—Full course, \$75; practical anatomy, \$10; matriculation, \$5; graduation, \$30. Gratuitous tickets (not including matriculation, practical anatomy, or graduation) will be issued to one student from each congressional district of the State, in compliance with the law making a donation to the building and apparatus of the college.

For further information address James A. Gray, M. D., Proctor, Atlanta, Ga.

SOUTHERN MEDICAL COLLEGE,

ATLANTA, GA.

PROFESSOR W. G. OWEN has resigned the chair of practice and has been elected emeritus professor. W. D. Bizzell, M. D., late of the chair of chemistry, succeeds Professor Owen, and Professor J. A. Burns has been appointed to the chair of chemistry.

FACULTY.—W. G. OWEN, M. D., Principles and Practice of Medicine (emeritus); T. S. POWELL, M. D., Obstetrics and Diseases of Women and Children, and Lecturer on Medical Ethics; R. C. WORD, M. D., Physiology and Lecturer on Hygiene; G. G. CRAWFORD, M. D., Operative and Clinical Surgery; W. PERRIN NICOLSON, M. D. (Dean), Descriptive and Special Anatomy; JOHN T. JOHNSON, M. D.,

Principles and Practice of Surgery; G. G. ROY, M. D., Materia Medica and Therapeutics, and Lecturer on Toxicology; A. G. HOBBS, M. D., Diseases of the Eye, Ear, and Throat; W. D. BIZZELL, M. D., Principles and Practice of Medicine; J. A. BURNS, Chemistry.

AUXILIARY PROFESSORS AND SPECIAL LECTURERS.—J. F. ALEXANDER, M. D., Practice of Medicine, and Lecturer on Clinical Medicine; B. H. CATCHING, D. D. S., Lecturer on Dental Surgery.

The fifth annual course will begin October 9, 1883, and continue until February 29, 1884.

REQUIREMENTS FOR GRADUATION.—Besides the usual requirements, dissection is obligatory.

FEES.—Matriculation, \$5; full course, \$75; demonstrator's fee, \$10; graduation, \$30.

For further information address W. Perrin Nicolson, M. D., Dean, P. O. Box 234, Atlanta, Ga.

Illinois.

RUSH MEDICAL COLLEGE,

CHICAGO.

DURING the year Dr. Roswell Park has resigned the lectureship of surgery, and his place has been supplied by the appointment of Dr. William T. Belfield. As has already been stated in this journal, the college is now building a hospital. For the first time, there is to be a preliminary examination this year, and we are informed that its prospective enforcement is drawing a superior class of pupils to the college.

FACULTY.—J. ADAMS ALLEN, M. D., LL. D. (President), Principles and Practice of Medicine; DE LASKIE MILLER, Ph. D., M. D., Obstetrics and Diseases of Children; MOSES GUNN, M. D., LL. D., Principles and Practice of Surgery and Clinical Surgery; JOSEPH P. ROSS, M. D., Clinical Medicine and Diseases of the Chest; WILLIAM H. BYFORD, M. D., Gynecology; EDWARD L. HOLMES, M. D., Diseases of the Eye and Ear; HENRY M. LYMAN, M. D., Physiology and Diseases of the Nervous System; JAMES H. ETHERIDGE, M. D. (Secretary), Materia Medica and Medical Jurisprudence; CHARLES T. PARKES, M. D., Anatomy; WALTER S. HAINES, M. D., Chemistry, Pharmacy, and Toxicology; JAMES NEVINS HYDE, M. D., Skin and Venereal Diseases; NORMAN BRIDGE, M. D., Hygiene and (Adjunct) Principles and Practice of Medicine.

Professors of Special Departments.—W. W. ALLPORT, M. D., D. D. S., Dental Pathology and Surgery (emeritus); TRUMAN W. BROPHY, M. D., D. D. S., Dental Pathology and Surgery; E. FLETCHER INGALS, M. D., Laryngology.

Adjunct Professors and Lecturers.—J. SUYDAM KNOX, M. D., Diseases of Children and Obstetrics; DANIEL T. NELSON, M. D., PHILIP ADOLPHUS, M. D., Gynecology; ALBERT B. STRONG, M. D. (Demonstrator), Anatomy; LAFAYETTE W. CASE, M. D., Dermatology; WILLIAM T. BELFIELD, M. D., Physiology and Pathology; EUGENE W. WHITNEY, M. D., Surgical Dressings and (Demonstrator) Surgery; ALFRED C. COTTON, M. D., Materia Medica and Therapeutics; EUGENE S. TALBOT, M. D., D. D. S., Dental Anatomy and Physiology; SAMUEL J. HOLMES, M. D., Pathological Anato-

my and Histology; DANIEL R. BROWER, M. D., Practice of Medicine; H. P. MERRIMAN, M. D., Gynæcology; JOHN A. ROBISON, M. D., Assistant in Clinical Medicine; LEWIS L. MCARTHUR, M. D., WILLIAM H. TAYLOR, M. D., CASSIUS D. WESTCOTT, M. D., Demonstrators of Chemistry; FREDERICK E. SHERMAN, M. D., THOMAS J. SHAW, M. D., Assistant Demonstrators of Anatomy; EDWARD P. DAVIS, M. D., Demonstrator of Physiology and Prosector in Surgery; WILLIAM H. MORGAN, M. D., Clinical Assistant in Diseases of Children.

The forty-first annual session begins September 25th, and continues twenty-one weeks.

A gradation of study is recommended and provided for, and those graduated after a three years' course receive a certificate of honor. Instruction in dentistry is included in the curriculum.

REQUIREMENTS FOR GRADUATION.—Two terms of clinical instruction, dissection of every region of the body, one course in practical chemistry, and the usual requirements in addition. Students who enter for three full winter terms may have their final examinations in descriptive anatomy, physiology, chemistry, materia medica, and therapeutics at the close of the second winter term.

FEES.—Matriculation (annual), \$5; course of lectures, \$75; dissection, \$5; practical chemistry, \$5; final examination, \$30. Anatomical and chemical material "at cost price."

The college will comply with the requirements of the Illinois State Board of Health. Address Professor James H. Etheridge, Secretary, 1634 Michigan Avenue, Chicago.

COLLEGE OF PHYSICIANS AND SURGEONS, OF CHICAGO, ILL.

PROFESSOR W. E. QUINE succeeds Dr. Carpenter in the chair of practice of medicine. Professor W. K. Harrison succeeds Dr. McCoy in the chair of medical chemistry, and Dr. R. W. Hall succeeds Dr. Power as demonstrator of anatomy. Dr. Burnett has resigned the lectureship on surgical anatomy.

FACULTY.—A. REEVES JACKSON, M. D., Surgical Diseases of Women and Clinical Gynæcology; SAMUEL A. MCWILLIAMS, M. D., Clinical Medicine, Diseases of the Chest, and Physical Diagnosis; DANIEL A. K. STEELE, M. D., Orthopædic Surgery; LEONARD ST. JOHN, M. D., Demonstrations of Surgery and Surgical Appliances; CHARLES WARRINGTON EARLE, M. D., Obstetrics; HENRY PALMER, M. D., Operative Surgery, Clinical Surgery, and Surgical Pathology; R. L. REA, M. D., Principles and Practice of Surgery and Clinical Surgery; FRANK E. WAXHAM, M. D., Diseases of Children; JOHN E. HARPER, M. D., Ophthalmology and Clinical Diseases of the Eye; W. E. QUINE, M. D., Practice of Medicine; J. J. M. ANGEAR, M. D., Principles of Medicine; A. W. HARLAN, D. D. S., Dental Surgery; W. A. JOHN, M. D., Inorganic Chemistry; ALBERT E. HOADLEY, M. D., Descriptive Anatomy; PINCKNEY FRENCH, M. D., Surgical Anatomy; F. B. EISEN-BOCKIUS, M. D., LL. B., Medical Jurisprudence; C. C. P. SILVA, M. D., Therapeutics; OSCAR A. KING, M. D., Diseases of

the Mind and Nervous System; ROMAIN J. CURTISS, M. D., State Medicine and Hygiene; E. E. HOLROYD, M. D., Physiology; W. K. HARRISON, M. D., Medical Chemistry; J. T. JELKS, M. D., Surgical Diseases of the Genito-Urinary System; R. U. HALL, M. D., Demonstrator of Anatomy.

Lecturers.—E. P. MURDOCK, M. D., Gynæcology; L. H. BURNETT, M. D., Surgical Anatomy; H. P. NEWMAN, M. D., Obstetrics; BOERNE BETTMAN, M. D., Ophthalmology and Otology; JAMES HUGHES LETCHER, M. D., Principles and Practice of Surgery; G. FRANK LYDSTON, M. D., Genito-Urinary Diseases; JAMES G. REID, D. D. S., Dental Anatomy and Physiology; C. B. GIBSON, Demonstrator of Inorganic Chemistry.

The winter session will begin September 25, 1883, and will continue twenty-four weeks. In the absence of a literary certificate, a preliminary examination is enforced. The requirements for graduation are as usual.

FEES.—Matriculation (paid annually), \$5; general ticket, admitting to all the lectures, and including all practical work in the chemical and physiological laboratories, \$50; from alumni of this college, and from its students who have taken and paid for two full courses of lectures, the matriculation fee only (\$5) will be expected; from alumni of other regular medical colleges, the matriculation fee and one half lecture fee will be required; dissecting ticket (each session), including dissecting material, \$10; graduation, \$30; tickets for Cook County Hospital (good till the following March) and for the Eye and Ear Infirmary—good for one year, each, \$5.

The college complies with the requirements of the Illinois State Board of Health.

Address D. A. K. STEELE, M. D., Secretary, 1801 State Street, Chicago, Ill.

WOMAN'S MEDICAL COLLEGE

OF CHICAGO, ILL.

FACULTY.—W. GODFREY DYAS, M. D., F. R. C. S., Theory and Practice of Medicine (emeritus); G. C. PAOLI, M. D., Materia Medica and Therapeutics (emeritus); T. DAVIS FITCH, M. D., Gynæcology (emeritus); WILLIAM H. BYFORD, M. D. (President), Gynæcology; CHARLES WARRINGTON EARLE, M. D. (Treasurer), Diseases of Children and Clinical Medicine; ISAAC N. DANFORTH, M. D., Pathology and Renal Diseases; HENRY M. LYMAN, M. D., Theory and Practice of Medicine; DANIEL R. BROWER, M. D., Diseases of the Nervous System, Medical Jurisprudence, and Clinical Medicine; SARAH HACKETT STEVENSON, M. D., Obstetrics; DAVID W. GRAHAM, M. D. (Secretary), Surgery; PLYM S. HAYES, M. D., Chemistry and Toxicology; W. J. MAYNARD, M. D., Dermatology; W. T. MONTGOMERY, M. D., Ophthalmology and Otology; E. FLETCHER INGALS, M. D., Diseases of the Chest and Throat; F. L. WADSWORTH, M. D., Physiology and Histology; MARIE J. MERGLER, M. D. (Associate), Gynæcology; WALTER L. DORLAND, M. D., Materia Medica and Therapeutics; MARY E. BATES, M. D., Lecturer on Anatomy; EUGENE S. TALBOTT, M. D., D. D. S., Dental Surgery; JOHN O. HOBBS, M. D., Demonstrator of Anatomy; JENNIE E. HAYNER, M. D., Lecturer on Hygiene; ROBERT S. HALL, M. D., Clinical Lecturer on Midwifery; EMMA M.

NICHOLS, M. D., Assistant in Physiology and Lecturer on Histology; HOMER N. THOMAS, M. D., Assistant in Diseases of the Chest and Throat; ELIZA H. ROOT, M. D., ISABEL R. COPP, M. D., Assistants in Clinical Medicine; ANNETTE S. DOBBIN, M. D., Assistant Demonstrator of Anatomy.

The fourteenth annual course of instruction will begin September 18, 1883, and will close April 22, 1884.

Students must present satisfactory proof of a good English education before matriculating. Certificates of graduation from a high school, or like institution, or a teacher's certificate from a county superintendent of schools, will be accepted as sufficient evidence of such education.

REQUIREMENTS FOR GRADUATION.—A candidate must have taken two courses in practical anatomy, and dissected each of the usual divisions of the subject at least once; and must have taken one course in practical chemistry and one course in hospital clinical instruction. This final examination must be, at least in part, in writing, which will be in lieu of the thesis heretofore required.

FEES.—Matriculation, annually, \$5; general ticket, \$50; demonstrator's ticket, \$5; chemical laboratory ticket, required but once, \$5; graduation, \$30.

The college complies with the requirements of the Illinois State Board of Health.

Address D. W. Graham, Secretary, 101 Warren Avenue, Chicago, Ill.

QUINCY COLLEGE OF MEDICINE (MEDICAL DEPARTMENT OF CHADDOCK COLLEGE), QUINCY, ILL.

FACULTY.—C. R. S. CURTIS, M. D. (Dean), Principles and Practice of Surgery; M. F. BASSETT, M. D., Principles and Practice of Medicine; VIRGIL McDAVITT, M. D., Obstetrics and Diseases of Women; WILLIAM A. BYRD, M. D., Clinical Surgery; L. H. COHEN, M. D., Chemistry and Toxicology; HENRY HATCH, M. D. (Registrar), Anatomy and Clinical Medicine; R. WOODS, M. D., Diseases of the Eye and Ear; CAREY B. ELLIS, M. D., Physiology and Hygiene; M. ROONEY, M. D., Clinical Medicine; HUGO ERICHSON, M. D., Diseases of the Mind and Nervous System; (vacancy), Materia Medica and Therapeutics; GEORGE CARLEY, Ph. D., Pharmacy; D. BRYAN BAKER, M. D., Demonstrator of Anatomy.

The second annual course begins October 8, 1883, and ends toward the close of March, 1884.

All applicants must present evidence of a good English education.

First course pupils will be examined on and be expected to give especial attention to anatomy, physiology, chemistry, and materia medica. Second and third course students will be particularly examined in the practical branches.

REQUISITES FOR GRADUATION.—Two courses of dissection, in addition to the usual requirements.

FEES.—Matriculation, \$5; professors' tickets, \$40; demonstrator's ticket, \$10; examination, \$25.

The college complies with the requirements of the Illinois State Board of Health.

Address C. R. S. Curtis, M. D., Dean, or Henry Hatch, M. D., Registrar, Quincy, Ill.

Indiana.

MEDICAL COLLEGE OF EVANSVILLE, EVANSVILLE, IND.

FACULTY.—M. J. BRAY, M. D., Clinical Surgery (emeritus); H. G. JONES, M. D. (Dean), Principles and Practice of Medicine; F. W. ACHILLES, M. D. (Secretary), Chemistry and Toxicology; P. Y. MCCOY, M. D., Principles and Practice of Surgery; GEORGE HODSON, M. D., Obstetrics; EDWIN WALKER, M. D., Diseases of Women and Diseases of the Nervous System; J. O. STILLSON, M. D., Physiology and Diseases of the Eye, Ear, and Throat; C. E. LINING, M. D., Materia Medica and Therapeutics; E. LINTHICUM, M. D., Genito-Urinary and Venereal Diseases, and Clinical Surgery; W. R. McMAHAN, M. D., Huntingburg, Ind., Surgical Pathology; L. D. BROSE, M. D., Anatomy; G. C. PERDUE, M. D., Lecturer on Diseases of the Skin; J. C. McCLURKIN, M. D., Adjunct Professor of Physiology and Histology; JACOB H. KERTH, M. D., Demonstrator of Anatomy; W. F. LAVAL, M. D., Assistant in Chemistry.

The eighteenth regular session will begin October 3, 1883, and continue until the last of February, 1884.

REQUIREMENTS FOR GRADUATION.—In addition to the ordinary requirements, two courses of dissection and one in practical chemistry.

FEES.—Course of lectures, \$40; matriculation, \$5; demonstrator's fee, \$5; graduation, \$25.

Address Professor F. W. Achilles, Secretary, No. 14 Lower Third Street, Evansville, Ind.

FORT WAYNE COLLEGE OF MEDICINE, FORT WAYNE, IND.

DR. W. H. BELL has been elected to the chair of nervous and mental diseases, and Dr. A. E. VanBuskirk to the chair of anatomy. Professor Gobrecht and Dr. Finnimore have resigned, and Dr. J. V. Lewis has been elected to the chair of materia medica, made vacant by the resignation of Dr. Finnimore. Women are admitted.

FACULTY.—R. W. THURFT, M. D., Puerperal Diseases and Diseases of Children (emeritus); CHRISTIAN B. STEMEN, M. D. (Dean), Surgery and Clinical Surgery; JAMES S. GREGG, M. D., Surgery and Clinical Surgery; GEORGE W. McCASKEY, Ph. B., M. D., Theory and Practice of Medicine and Clinical Medicine; I. ELLIS LYONS, M. D., Obstetrics; KENT K. WHEELOCK, M. D., Physiology and Clinical Medicine; CHARLES R. DRYER, M. D., Chemistry and Toxicology; A. E. VANBUSKIRK, M. D., Anatomy and Clinical Surgery; JAMES V. LEWIS, M. D., Materia Medica and Therapeutics; F. W. ENTRIKN, M. D., Diseases of Women; NORMAN TEAL, M. D., Orthopaedic Surgery and Clinical Surgery; WILLIAM SCOTT, M. D., Diseases of the Throat and Respiratory Organs; J. H. KELLOGG, M. D., Sanitary Science and Hygiene; W. H. BELL, M. D., Nervous and Mental Diseases; Hon. JOSEPH K. EDGERTON, Lecturer on Medical Jurisprudence; J. T. WOODS, M. D., Lecturer on General Fractures; G. B. STEMEN, M. D., Assistant in the Chemical Laboratory; G. N. WORLEY, M. D., Lecturer on

Laryngology; M. E. RENNER, M. D., Adjunct Professor of Physiology.

The fifth annual session began September 11th, and will close March 1st.

REQUIREMENTS FOR GRADUATION.—Dissection for one session, practical instruction in chemistry, and hospital attendance, besides the usual requirements. The average on monthly examinations affects the candidate's final standing.

FEES.—Matrieculation, \$5; course of lectures, \$40; dissection, \$5; laboratory, \$5; hospital, \$5; graduation, \$25. Address Professor C. B. Stemen, Dean, 66 Calhoun Street, Fort Wayne, Ind.

CENTRAL COLLEGE OF PHYSICIANS AND SURGEONS,

INDIANAPOLIS, IND.

FACULTY.—CHARLES D. PEARSON, M. D., Diseases of the Nervous System; W. S. HAYMOND, M. D. (Dean), Principles and Practice of Surgery; JOHN MOFFETT, M. D., Obstetrics; R. E. HAUGHTON, M. D., Surgical Pathology, Operative and Clinical Surgery; G. C. SMYTHIE, M. D., Principles and Practice of Medicine and Sanitary Science; JOSEPH EASTMAN, M. D. (Secretary), Diseases of Women and Clinical Surgery; GEORGE N. DUZAN, M. D., Physiology and Clinical Medicine; R. FRENCH STONE, M. D., Materia Medica and Therapeutics, and Clinical Medicine; IRA A. E. LYONS, M. D., Diseases of the Eye and Ear; JOHN A. SUTCLIFFE, A. M., M. D., Anatomy and Genito-Urinary Diseases; PHILIP S. BAKER, A. M., M. D., Chemistry and Toxicology; W. H. THOMAS, M. D., Demonstrator of Anatomy and Lecturer on Osteology; J. I. ROOKER, M. D., Lecturer on Physical Diagnosis; the Hon. JOHN COBURN, Lecturer on Medical Jurisprudence; J. T. BARKER, M. D., Lecturer on Physiology; S. E. EARP, M. S., M. D., Demonstrator of Chemistry; CANADA BUTTON, M. D., Prosecutor to the Chair of Anatomy; JOHN B. LONG, M. D., Assistant Demonstrator of Anatomy.

The preliminary course will begin Wednesday, September 26, 1883, and continue till the commencement of the regular session, which begins Wednesday, October 3, 1883, and continues till March 1, 1884.

A preliminary examination is required of all who do not present evidence of a good English education. The voluntary three years' course is graded as follows: *First year*, anatomy (including dissections), histology, physiology, general chemistry; *second year*, anatomy (practical and surgical), medical chemistry, materia medica and therapeutics, minor surgery, and clinical medicine and surgery; *third year*, principles and practice of medicine, obstetrics and gynecology, surgery, ophthalmology and otology, clinical medicine and surgery. Students who enter the graded course will be entitled to an examination at the end of each regular session, and those passing a satisfactory examination to a certificate. No other examination will be required of them.

REQUIREMENTS FOR GRADUATION.—These include dissection.

FEES.—Matrieculation, \$5; laboratory ticket, \$5; professors' tickets, \$40; demonstrator's ticket, \$5; hospital tickets, \$6; graduation, \$25.

Address W. S. Haymond, M. D., Dean, 42 East Ohio Street, Indianapolis, Ind.

Iowa.

COLLEGE OF PHYSICIANS AND SURGEONS,

KEOKUK, IOWA.

FACULTY.—J. C. HUGHES, M. D. (Dean), Institutes and Practice of Surgery and Surgical Clinics; JOHN NORTH, M. D., Ph. C., Chemistry, Toxicology, and Materia Medica; GEORGE F. JENKINS, M. D., Principles and Practice of Medicine and Medical Clinics; J. A. SCROOGS, M. D., Obstetrics and Diseases of Women; GEORGE M. KELLOGG, M. D., Anatomy and Demonstrator of Anatomy; A. G. FIELD, M. D., Physiology, Pathology, General Therapeutics, and Public Hygiene; H. B. YOUNG, M. D., Lecturer on Ophthalmology and Otology; M. R. KING, Lecturer on Medical Jurisprudence; R. HEISER, Taxidermist and Curator.

The forty-third regular session will open October 10, 1883, and continue twenty weeks.

A certificate of graduation from a literary college, academy, high school, or first-class teacher's certificate, or a matriculation examination in the branches of a good English education is required for admission. Women are admitted.

REQUIREMENTS FOR GRADUATION.—Two courses in dissection. No Thesis is required. The other requirements are as usual.

FEES.—For the entire course of instruction, \$20; matriculation, \$5; demonstrator's ticket, \$5; graduation, \$30.

Further information can be obtained from J. C. Hughes, M. D., Dean, Keokuk, Iowa.

MEDICAL DEPARTMENT OF THE STATE UNIVERSITY OF IOWA,

IOWA CITY.

The fourteenth annual course of lectures will begin October 3, 1883, and close March 5, 1884.

A preliminary examination will be required of all students entering the first year, and also of those from other colleges which require no preliminary examination.

FACULTY.—GUSTAVUS HINRICHS, M. D., Chemistry and Toxicology; W. F. PECK, M. D., Surgery and Clinical Surgery; P. J. FARNSWORTH, M. D., Materia Medica and Diseases of Children; W. S. ROBERTSON, M. D., Theory and Practice of Medicine, and Clinical Medicine; J. C. SHRADER, M. D., Obstetrics and Diseases of Women; W. D. MIDDLETON, M. D., Physiology and Microscopic Anatomy; ELMER F. CLAPP, M. D., Anatomy; JAMES M. LOVE, LL. D., Medical Jurisprudence; C. M. HOBBY, M. D., Lecturer on Ophthalmology and Otology, Demonstrator of Anatomy, and Curator of the Museum; O. T. GILLET, M. D. (Secretary), Assistant in Surgery; S. S. LYTLE, M. D., Prosecutor in Anatomy.

REQUIREMENTS FOR GRADUATION.—The usual requirements. Those taking the graded course are not required to furnish certificate of time of study.

FEES.—Lectures for yearly session, \$20; matriculation

ticket, \$5; demonstrator's ticket, \$10; examination fee (for final examination), \$25; hospital ticket, \$3. No charge for anatomical material.

This college has undertaken to comply with the requirements of the Illinois State Board of Health. Both men and women are admitted as students.

For further information, address W. F. Peck, M. D., Dean, Davenport, Iowa.

THE IOWA COLLEGE OF PHYSICIANS AND SURGEONS,

DES MOINES.

FACULTY.—J. A. BLANCHARD, M. D. (Dean), Principles and Practice of Medicine; A. C. SIMONTON, M. D., Principles and Practice of Surgery, and Clinical Surgery; J. F. KENNEDY, A. M., M. D. (Secretary), Obstetrics and Clinical Diseases of Children; LEWIS SCHOOLER, M. D., Anatomy, General and Descriptive; L. C. SWIFT, M. D., Physiology, Clinical Pathology, and Hygiene; W. W. HALE, LL. B., M. D., Materia Medica and Therapeutics; W. H. WARD, M. D., Gynecology; T. E. POPE, A. M., Chemistry and Toxicology; C. M. COLVIN, M. D., Diseases of Children, Orthopædic Surgery, and Clinical Medicine; ROBERT MC-NUTT, A. M., M. D., Dermatology and Clinical Medicine; E. H. HAZEN, M. D., Diseases of the Eye and Ear; F. E. CRUTTENDEN, M. D., Diseases of the Throat and Nasal Passages; JAMES T. PRIESTLEY, M. D., Clinical Surgery and Genito-Urinary Diseases; D. S. FAIRCHILD, M. D., Pathology, Histology, and Diseases of the Nervous System; the Hon. C. C. NOURSE, Medical Jurisprudence.

The second annual session will commence September 25, 1883, and close March 5, 1884.

REQUIREMENTS FOR GRADUATION.—Besides the usual requirements, satisfactory evidence of a preliminary education in the higher English branches, as taught in the high schools, academies, or literary colleges of this State, or be subjected to an examination in these branches, at the discretion of the faculty.

Undergraduates who elect a course of three annual sessions will be examined in anatomy, physiology, materia medica, and chemistry at the end of the second year or course, leaving the third year for especial attention to the more practical branches.

FEES.—Matriculation (paid but once), \$5; course of lectures, \$40; demonstrator's ticket, \$5; final examination fee, \$25; material for dissection, at cost.

For further information address J. A. Blanchard, M. D., Dean, 410 Fourth Street, Des Moines, Iowa.

Kentucky.

MEDICAL DEPARTMENT OF THE UNIVERSITY OF LOUISVILLE, LOUISVILLE.

DR. OCTERLONY succeeds Dr. Parvin in the chair of obstetrics.

FACULTY.—J. M. BODINE, M. D. (Dean), Anatomy and Diseases of the Ear and Throat; LUNSFORD P. YANDELL,

M. D., Principles and Practice of Medicine and Clinical Medicine; E. R. PALMER, M. D., Physiology and Diseases of the Chest; T. S. BELL, M. D., State Medicine and Sanitary Science; JAMES W. HOLLAND, M. D., Materia Medica, Therapeutics, and Clinical Medicine; DAVID W. YANDELL, M. D., Surgery and Clinical Surgery; W. O. ROBERTS, M. D., Surgical Pathology and Operative Surgery; JOHN A. OCTERLONY, M. D., Obstetrics and Diseases of Women and Children; H. A. COTTELL, M. D., Lecturer on Medical Chemistry; W. CHEATHAM, M. D., Clinical Lecturer on Diseases of Eye, Ear, and Throat; L. S. McMURTRY, M. D., and R. B. GILBERT, M. D., Demonstrators of Anatomy; C. SKINNER, M. D., Assistant Demonstrator.

SPECIAL DEMONSTRATORS.—H. A. COTTELL, M. D., Microscopy; W. CHEATHAM, M. D., Ophthalmoscopy, Laryngoscopy, and Otoscopy; SAMUEL AYERS, M. D., Surgical Dressings.

The forty-seventh annual session began September 10th, and will continue until March 1, 1884. The College Dispensary and the SS. Mary and Elizabeth Hospital furnish clinical material. Frequent examinations are held, and there are special and optional manipulative courses in the laboratories.

REQUIREMENTS FOR GRADUATION.—Besides the usual requirements, the candidate must have taken the ticket of the Demonstrator of Anatomy one session, and have attended one course of clinical instruction in the Louisville Marine Hospital, or some other institution approved by the Faculty. A thesis is not required.

FEES.—Course of lectures, \$75; matriculation ticket, \$5; graduation fee, \$30; dissecting-room, \$10; hospital ticket (required by the city), \$5.

Further information may be obtained by addressing J. M. Bodine, M. D., Dean, Louisville, Ky.

KENTUCKY SCHOOL OF MEDICINE,

LOUISVILLE, KY.

FACULTY.—W. H. WATHEN, M. D. (Dean), Obstetrics and Diseases of Women; TURNER ANDERSON, M. D., Principles and Practice of Medicine and Diseases of Children; M. F. COOMES, M. D., Physiology and Diseases of the Eye, Ear, Throat, and Nose; C. W. KELLY, M. D. (Treasurer), Anatomy and Clinical Medicine; HENRY ORENDORF, M. D., Materia Medica, Therapeutics, and Venereal Diseases; S. E. WOODY, M. D., Medical Chemistry and Toxicology; JOSEPH M. MATHEWS, M. D., Surgical Pathology and Diseases of the Rectum; J. M. HOLLOWAY, M. D., Surgery and Clinical Surgery; J. B. MARVIN, B. S., M. D., Medical Microscopy and Nervous Diseases; H. HORACE GRANT, M. D., Lecturer on Operative and Minor Surgery; R. L. THOMSON, M. D., Demonstrator of Anatomy.

A good English education is necessary to admission.

The preliminary course will begin January 7, 1884. The twenty-eighth annual course will begin February 10, 1884, and will continue twenty weeks. The graded system, which is optional, can be pursued as follows: *First session*, anatomy, physiology, and general chemistry; *second session*, materia medica, surgical pathology, medical chemistry, prac-

tice of medicine, clinical medicine, surgery, clinical surgery, and microscopy; *third session*, therapeutics, obstetrics and diseases of women, surgery and clinical surgery, practice of medicine, clinical medicine, and nervous diseases. Examinations on the studies of each grade are held at the end of each session, and official certificates of proficiency on the studies of each grade are given to those whose examinations have been satisfactory.

REQUIREMENTS FOR GRADUATION.—The candidate must have dissected the several regions of the body; he must have attended clinical instruction in the City Hospital each year of attendance at the college. The other requirements are as usual.

FEES.—Matriculation, \$5; professors' tickets, \$75; dissection, \$10; graduation, \$30; clinical lectures at the City Hospital, \$5.

Address W. H. Wathen, M. D., Dean, Fourth and Chestnut Streets, Louisville, Ky.

LOUISVILLE MEDICAL COLLEGE,

LOUISVILLE, KY.

FACULTY.—C. W. KELLY, M. D. (Registrar), Descriptive and Surgical Anatomy and Clinical Medicine; J. A. IRELAND, M. D. (Dean), Obstetrics and Gynæcology; L. D. KASTENBINE, M. D., Chemistry and Urinology; TURNER ANDERSON, M. D., Materia Medica and Therapeutics; EDWARD MILLER, M. D. (Secretary), Principles and Practice of Surgery; W. H. GALT, M. D., Principles and Practice of Medicine; JAMES M. HOLLOWAY, M. D., Clinical and Operative Surgery; SAMUEL COCHRAN, M. D., Physiology.

Demonstrators.—SAMUEL COCHRAN, M. D., Anatomy; GEORGE M. WARNER, M. D., Materia Medica and Practice of Medicine; H. B. RITTER, M. D., Obstetrics and Gynæcology; WILLIAM T. CARTER, M. D., Diseases of Children.

A preliminary course began September 3d. The next regular session will commence October 1, 1883, and will terminate in the last week in February, 1884.

REQUIREMENTS FOR GRADUATION.—Practical anatomy during one winter's session; one course of clinical instruction; in other respects, as usual.

FEES.—Matriculation, \$5; professors' tickets, \$75; demonstrator's ticket, \$10; graduation, \$30; clinical lectures at the Louisville City Hospital, \$5.

Address Professor C. W. Kelly, Registrar, southeast corner Second and Green Streets, Louisville, Ky.

Louisiana.

MEDICAL DEPARTMENT OF THE UNIVERSITY OF LOUISIANA,

NEW ORLEANS.

FACULTY.—T. G. RICHARDSON, M. D. (Dean), General and Clinical Surgery; SAMUEL M. BEMISS, M. D., Theory and Practice of Medicine and Clinical Medicine; STANFORD E. CHAILLÉ, M. D., Physiology and Pathological Anatomy; JOSEPH JONES, M. D., Chemistry and Clinical Medicine; SAMUEL LOGAN, M. D., Anatomy and Clinical Surgery; ERNEST S. LEWIS, M. D., Obstetrics and Diseases of Women

and Children; JOHN B. ELLIOTT, M. D., Materia Medica, Therapeutics, and Hygiene; ALBERT B. MILES, M. D., Demonstrator of Anatomy.

The fiftieth annual course will begin October 22, 1883, and close March 29, 1884. The Charity Hospital furnishes material for clinical and operative medicine and surgery.

REQUIREMENTS FOR GRADUATION.—The ordinary requirements.

FEES.—Tickets of the professors, \$140; practical anatomy, \$10; matriculation, \$5; graduation, \$30.

For further information address T. G. Richardson, M. D., Dean, New Orleans, La.

Maine.

MEDICAL SCHOOL OF MAINE

(BOWDOIN COLLEGE, BRUNSWICK).

FACULTY.—ISRAEL T. DANA, M. D., Pathology and Practice; ALFRED MITCHELL, M. D. (Secretary), Obstetrics and Diseases of Women and Children; CHARLES W. GODDARD, Medical Jurisprudence; FREDERIC H. GERRISH, M. D., Anatomy; HENRY CARMICHAEL, PH. D., Chemistry; BURT G. WILDER, M. D., Physiology; STEPHEN H. WEEKS, M. D., Surgery and Clinical Surgery; CHARLES O. HUNT, M. D., Materia Medica and Therapeutics; IRVING E. KIMBALL, M. D., Demonstrator of Anatomy; EVERETT T. NEALEY, M. D., Demonstrator of Histology.

The sixty-fourth course of lectures will begin February 7, 1884, and will continue sixteen weeks. Candidates for matriculation are examined unless they are graduates of a literary institution. The examination will be held February 7th.

REQUIREMENTS FOR GRADUATION.—The requirements are as usual, the examination being oral and in writing.

FEES.—Lectures, \$78; matriculation (each term), \$5; graduation, \$25; analytical chemistry, \$10.

For further information address Alfred Mitchell, M. D., Secretary, Brunswick, Me.

Maryland.

UNIVERSITY OF MARYLAND,

SCHOOL OF MEDICINE,

BALTIMORE.

The chair of chemistry is vacant, and we understand that it will not be filled this year. The lectures in that branch will be given by R. Dorsey Coale, Ph. D.

FACULTY.—WILLIAM E. A. AIKIN, M. D., LL. D., Chemistry and Pharmacy (emeritus); G. W. MILTENBERGER, M. D., Obstetrics; RICHARD MCSHERRY, M. D., Principles and Practice of Medicine; CHRISTOPHER JOHNSTON, M. D., Surgery (emeritus); SAMUEL C. CHEW, M. D., Materia Medica and Therapeutics, and Lecturer on Diseases of the Throat and Chest; FRANK DONALDSON, M. D., Diseases of the Throat and Chest; WILLIAM T. HOWARD, M. D., Diseases of Women and Children and Clinical Medicine; JULIAN J. CHISHOLM, M. D., Eye and Ear Diseases; FRANCIS T. MILES, M. D., Physiology and (Clinical) Diseases of the Nervous System; L. McLANE TIFFANY, M. D. (Dean), sur-

gery; J. EDWIN MICHAEL, M. D., Anatomy and Clinical Surgery; I. EDMONDSON ATKINSON, M. D., Pathology and (Clinical) Dermatology; RANDOLPH WINSLOW, M. D., Demonstrator of Anatomy; HERBERT HARLAN, M. D., Assistant Demonstrator; J. LEIGHT DÖRKSEN, M. D., H. P. GALLAGHER, M. D., W. B. CANFIELD, JR., M. D., Prosectors.

Chiefs of Clinics and Private Instructors.—H. CLINTON MCSHERRY, M. D., Diseases of the Throat and Chest; JOHN G. JAY, M. D., Genito-Urinary Diseases; R. DORSEY COALE, C. E., Chemistry; W. P. CHUNN, M. D., Diseases of Women and Children; T. W. CLARK, M. D., Diseases of the Nervous System; H. HOMER HOFFMAN, M. D., Practice of Medicine; W. B. CANFIELD, M. D., Surgery; HIRAM WOODS, M. D., Dermatology; L. E. NEALE, M. D., Obstetrics; I. BERMAN, M. D., Normal and Pathological Microscopical Anatomy; H. HARLAN, M. D., Eye and Ear Diseases; CHRISTOPHER JOHNSTON, JR., M. D., JOSEPH F. PERKINS, M. D., Diseases of the Throat and Chest.

The introductory lectures begin September 20th. The seventy-sixth annual session begins October 1st, and ends about the middle of March. The university has its own hospital, embracing a lying-in department and a dispensary, together with a general hospital service.

REQUIREMENTS FOR GRADUATION.—Candidates who take three courses may have their final examination in chemistry, anatomy, physiology, and materia medica at the end of the second course. In other respects the requirements are as usual.

FEES.—Matriculation, \$5; dissection, \$10; course of lectures, \$120; graduation, \$30. Holders of scholarships pay only \$50 for the lecture course.

For further information, address Professor L. McLane Tiffany, Dean, 137 Park Avenue, Baltimore.

BALTIMORE MEDICAL COLLEGE,

BALTIMORE.

FACULTY.—HARVEY L. BYRD, M. D. (President), Obstetrics and Diseases of Women and Children; W. ROBERT MONROE, M. D. (Dean), Materia Medica, Therapeutics, and Hygiene; THOMAS DAUGHERTY, M. D., Physiology; G. HALSTEAD BOYLAND, M. D., Surgery; CHARLES G. HILL, M. D., Anatomy, and (Clinical) Insanity and Nervous Diseases; ROBERT H. P. ELLIS, M. D., Principles and Practice of Medicine; (Vacancy), Professor of Chemistry; LEWIS M. EASTMAN, M. D., Microscopy; F. W. PEARSON, M. D., (Clinical) Diseases of the Chest and Throat; GEORGE P. YOST, M. D., (Clinical) Dermatology; J. H. SCARFF, M. D., (Clinical) Gynæcology; J. L. DÖRKSEN, M. D., (Clinical) Diseases of the Eye and Ear; THOMAS H. PARRAMORE, D. D. S., (Clinical) Oral Surgery; JAMES G. LINTHICUM, M. D., (Clinical) Obstetrics; Z. K. WILEY, M. D., Demonstrator of Anatomy.

The present collegiate year began September 5th, and will continue until April, 1884.

Students, unless matriculates of some literary institution or medical college, will be required to furnish sufficient evidence of a good English education.

REQUIREMENTS FOR GRADUATION.—As usual.

FEES.—Matriculation, \$5; general ticket, \$120; dissection, \$10; graduation, \$30.

Address Dr. W. R. Monroe, Dean, 249 Bolton Street, Baltimore, Md.

Massachusetts.

HARVARD MEDICAL SCHOOL

(MEDICAL DEPARTMENT OF HARVARD UNIVERSITY),
BOSTON.

As we have before announced, Dr. Oliver Wendell Holmes has resigned the chair of anatomy, becoming professor emeritus, and Dr. Calvin Ellis has resigned the office of dean. The teaching corps now stands as follows:

FACULTY.—CALVIN ELLIS, M. D., Clinical Medicine; OLIVER W. HOLMES, M. D., LL. D., Anatomy (emeritus); HENRY J. BIGELOW, M. D., Surgery (emeritus); FRANCIS MINOT, M. D., Theory and Practice of Physic; JOHN P. REYNOLDS, M. D., Obstetrics; HENRY W. WILLIAMS, M. D., Ophthalmology; DAVID W. CHEEVER, M. D., Surgery; JAMES C. WHITE, M. D., Dermatology; ROBERT T. EDES, M. D., Materia Medica; HENRY P. BOWDITCH, M. D. (Dean), Physiology; CHARLES F. FOLSOM, M. D., Assistant Professor of Mental Diseases; FREDERICK I. KNIGHT, M. D., Assistant Professor of Laryngology; CHARLES B. PORTER, M. D., Assistant Professor in Surgery; J. COLLINS WARREN, M. D., Assistant Professor in Surgery; REGINALD H. FITZ, M. D., Pathological cause, and is probably one of the most frequent. cal Anatomy; WILLIAM L. RICHARDSON, M. D., Assistant Professor of Obstetrics; THOMAS DWIGHT, M. D., Anatomy; EDWARD S. WOOD, M. D., Chemistry; WILLIAM H. BAKER, M. D., Assistant Professor of Gynæcology; WILLIAM B. HILLS, M. D., Instructor in Chemistry; WILLIAM F. WHITNEY, M. D., Curator.

OTHER INSTRUCTORS.—FRANK W. DRAPER, M. D., Forensic Medicine; HENRY P. QUINCY, M. D., Histology; EDWARD N. WHITTIER, M. D., Theory and Practice of Physic; FRANCIS A. HARRIS, M. D., Demonstrator of Medico-legal Examinations; WILLIAM P. BOLLES, M. D., Materia Medica; EDWARD H. BRADFORD, M. D., Clinical Surgery; FRANCIS H. DAVENPORT, M. D., Gynæcology; GEORGE M. GARLAND, M. D., Clinical Medicine; JOSEPH W. WARREN, M. D., Physiology; MAURICE H. RICHARDSON, M. D., Demonstrator of Anatomy; WILLIAM W. GANNET, M. D., Pathological Anatomy; CHARLES S. MINOT, S. D., Embryology; WILLIAM C. EMERSON, M. D., Chemistry; WALTER J. OTIS, M. D., Anatomy; SAMUEL J. MIXTER, M. D., Anatomy; CHARLES HARRINGTON, M. D., Chemistry.

SPECIAL CLINICAL INSTRUCTORS.—JOHN HOMANS, M. D., Diagnosis and Treatment of Ovarian Tumors; FRANCIS B. GREENOUGH, M. D., and ABNER POST, M. D., Syphilis; OLIVER F. WADSWORTH, M. D., Ophthalmoscopy; J. ORNE GREEN, M. D., and CLARENCE J. BLAKE, M. D., Otology; AMOS L. MASON, M. D., and FREDERICK C. SHATTUCK, M. D., Auscultation; JOSEPH P. OLIVER, M. D., and THOMAS M. ROTCH, M. D., Diseases of Children; SAMUEL G. WEBBER, M. D., and JAMES J. PUTNAM, M. D., Diseases of the Nervous System; JAMES R. CHADWICK, M. D., Gynæcology.

The one hundred and first annual session begins Sep-

tember 27, 1883, and ends on the last Wednesday in June, 1884, the intervening period being divided into two equal terms.

Except those who have passed the examination for admission to Harvard College, students will not be admitted until they have passed an examination in English, Latin, physics, and either French, German, algebra, plane geometry, or botany.

In the four years' course (recommended) the gradation is as follows: *First year*, anatomy, physiology, and general chemistry; *second year*, practical and topographical anatomy, medical chemistry, materia medica, pathological anatomy, clinical medicine, surgery, and clinical surgery; *third year*, therapeutics, obstetrics, theory and practice of medicine, clinical medicine, surgery, and clinical surgery; *fourth year*, ophthalmology, otology, dermatology, syphilis, laryngology, mental diseases, diseases of the nervous system, diseases of women, diseases of children, obstetrics, clinical and operative obstetrics, clinical medicine, clinical and operative surgery, forensic medicine.

In the three years' course (required) it is as follows: *First year*, anatomy, physiology, and general chemistry; *second year*, practical and topographical anatomy, medical chemistry, materia medica, pathological anatomy, clinical medicine, and clinical surgery; *third year*, therapeutics, obstetrics, theory and practice of medicine, clinical medicine, surgery, clinical surgery, ophthalmology, dermatology, syphilis, otology, laryngology, mental diseases, diseases of the nervous system, diseases of women, diseases of children, forensic medicine.

REQUIREMENTS FOR GRADUATION.—Students are examined at the end of each year's study, mainly in writing. The degree is still granted after three years' study, but the course of four years, with an average of seventy-five per cent. in all the examinations, entitles the candidate to the degree *cum laude*.

FEES.—Matriculation, \$5; each year's instruction, \$200; half-year, \$120; graduation, \$30. A few scholarships have been established.

On the 17th of October, the one hundredth anniversary of its opening, the school will occupy its new building, of the character of which our readers have already been informed. The school will comply with the requirements of the Illinois State Board of Health.

For further particulars, address Dr. H. P. Bowditch, Dean.

COLLEGE OF PHYSICIANS AND SURGEONS,

BOSTON, MASS.

FACULTY.—T. HAVEN DEARING, M. D. (Dean), Principles and Practice of Surgery; ELISHA CHENERY, M. D., Principles and Practice of Medicine; ASA F. PATTEE, M. D., Materia Medica and Therapeutics; ARTHUR H. WILSON, M. D., Anatomy; JOSHUA B. TREADWELL, M. D., Clinical Medicine; H. W. DUDLEY, M. D., Pathology; GEORGE E. MECUEN, M. D., Obstetrics; ARTHUR B. MORONG, M. D., Physiology and Hygiene; WILLIAM R. CHIPMAN, M. D., Operative Surgery; FREDERICK W. VOGEL, M. D., Special Pathology and Microscopy.

LECTURERS ON SPECIAL SUBJECTS.—JUDGE E. C. BUMPUS, Medical Jurisprudence; ASA F. PATTEE, M. D., Diseases of the Nervous System; ROSCOE E. BROWN, M. D., Ophthalmology and Otology; T. HAVEN DEARING, M. D., Dermatology; ARTHUR H. WILSON, M. D., Diseases of the Genito-Urinary System; JOHN F. WELCH, M. D., Laryngoscopy and Diseases of the Throat; ELISHA CHENERY, M. D., Gynaecology and Diseases of Children; ALBERT J. HAHN, M. D., Instructor in Chemistry and Toxicology; CHARLES F. OSMAN, M. D., Obstetrics; ANDREW F. MEANS, Practice of Medicine; W. H. FALES, M. D., Demonstrator of Anatomy.

The fourth annual course will begin October 10, 1883, and end May 14, 1884.

REQUIREMENTS FOR GRADUATION.—Besides the ordinary requirements, candidates must have dissected at least three parts, fulfilled all the requirements of laboratory work, and maintained good deportment.

FEES.—Matriculation, yearly, \$5; tickets for the full course, \$85; demonstrator's ticket, \$5; anatomical material, for each part, \$2 or \$4. A deposit of \$5 will be required of each student in the chemical laboratory to cover actual cost of chemicals and breakage. Graduation fee, \$30. Fee for the entire three years' tuition, including matriculation and graduation, \$225, *when paid in advance*. Graduates of other regular schools, or those who have attended three full courses of lectures in other recognized colleges, will be allowed to attend one course, or more if they desire, and graduate for a fee of \$75. Instruction in single branches, \$20 a year for each branch. This includes the matriculation fee.

For further information address T. Haven Dearing, M. D., Dean, Braintree, Mass.

Michigan.

UNIVERSITY OF MICHIGAN,

DEPARTMENT OF MEDICINE AND SURGERY,

ANN ARBOR.

THE following changes have been made during the year: Dr. J. N. Martin has been made assistant in surgery, Dr. C. M. Frye in materia medica and ophthalmology, and Dr. O. F. Chadbourne (secretary) in medicine. A course in comparative embryology has been added, also a special course of demonstrations in physiology.

FACULTY.—ALONZO B. PALMER, M. D., LL. D. (Dean), Pathology, Practice of Medicine, and Clinical Medicine; CORYDEN L. FORD, M. D., LL. D., Anatomy; ALBERT B. PRESCOTT, M. D., Organic and Applied Chemistry and Pharmacy; GEORGE E. FROTHINGHAM, M. D., Materia Medica and Ophthalmology; DONALD MACLEAN, M. D., Surgery and Clinical Surgery; EDWARD S. DUNSTER, M. D., Obstetrics and Diseases of Women and Children, and Clinical Gynaecology; JOHN W. LANGLEY, M. D., General Chemistry; HENRY SEWALL, B. S., Ph. D., Physiology; WILLIAM J. HERDMAN, Ph. B., M. D., Pathological Anatomy and Demonstrator of Anatomy; VICTOR C. VAUGHAN, Ph. D., M. D., Physiological and Pathological Chemistry, and Materia Medica and Therapeutics (Associate); CHARLES H. STOWELL, M. D., Histology and Microscopy.

Other Instructors.—GEORGE A. HENDRICKS, M. D. (Culator), Anatomy; OSBOURNE F. CHADBOURNE, M. D. (Secretary), Assistant in Medicine; CHARLES M. FRYE, M. D., Assistant in Materia Medica and Ophthalmology; LORIN HALL, M. D., Assistant in Microscopy and General Histology; JAMES N. MARTIN, M. D., Assistant in Surgery; HUGO LUPINSKI, Ph. C., M. D., LENA C. LELAND, M. D., Assistant Demonstrators of Anatomy.

The thirty-fourth annual course begins October 1st, and closes late in June. Except graduates and matriculates in letters, applicants for admission must pass a preliminary examination. Both men and women are admitted to the classes. The three years' course is graded as follows: *First year*, human and comparative anatomy, embryology, histology, physiology, chemistry, and materia medica and therapeutics; *second year*, continuation in review of anatomy, histology, physiology, chemistry, and materia medica and therapeutics, with pathology and practice of medicine, surgery, and obstetrics; *third year*, practice of medicine, surgery, obstetrics and diseases of women and children, ophthalmology and otology, with clinical medicine and surgery, and clinical gynecology. There is an optional course in physiological and pathological chemistry, and another in toxicology. The men and women dissect in separate rooms, and the professors exercise their discretion about giving lectures and demonstrations to the two sexes apart, but most of the instruction is in common. The examinations are held at the end of each year, partly in writing.

REQUIREMENTS FOR GRADUATION.—These include practical anatomy and practical chemistry. No Thesis is required.

FEES.—Matriculation, \$10 for residents of Michigan, \$25 for others; annual course, \$25 for residents, \$35 for others; graduation, \$10; anatomical material for the whole course, \$20. The annual laboratory expenses average less than \$20.

This college will fulfill the requirements of the Illinois State Board of Health. Address Professor A. B. Palmer-Dean.

MICHIGAN COLLEGE OF MEDICINE,

DETROIT, MICH.

J. J. MULHERON, M. D., has resigned, and his chair has been filled by Duncan McLeod, M. D.; E. P. Anderson, M. D., has resigned, and J. D. Munson, M. D., has been appointed to fill the vacancy; a clinical hospital has been established in the college building.

FACULTY.—HENRY F. LYSER, M. D. (President), Principles and Practice of Medicine; WILLIAM BRODIE, M. D., Clinical Medicine; JAMES B. BOOK, M. D. (Registrar), Principles and Practice of Surgery and Clinical Surgery; WILLIAM C. GUSTIN, M. D., Obstetrics, Clinical Midwifery, and Diseases of Children; DANIEL LA FERTE, M. D. (Secretary), Anatomy, Orthopædic Surgery, and Clinical Surgery; C. HENRI LEONARD, M. D., Diseases of Women and Clinical Gynecology; CHARLES DOUGLAS, M. D., Diseases of Children and Clinical Medicine; J. E. CLARK, M. D., General Chemistry and Physics; CHARLES C. YEMANS, M. D., Genito-Urinary Diseases, and Diseases of the Skin; CHARLES J.

LUNDY, M. D., Diseases of the Eye, Ear, and Throat; WILLIAM C. MAYBURY, Esq., Medical Jurisprudence; C. A. DEVENDORF, M. D., Clinical Obstetrics, and the Puerperal Diseases; H. C. WYMAN, M. D., Physiology and Histology; DUNCAN McLEOD, M. D., Institutes of Medicine, Materia Medica, and Therapeutics; JAMES D. MUNSON, M. D., Lecturer on Diseases of the Nervous System; F. W. OWEN, M. D., and W. N. MEREDITH, M. D., Demonstrators of Anatomy; E. A. P. RIKY, M. D., Instructor in Microscopy.

The fourth annual session began September 4, 1883, and will continue six months. The three years' course is graded as follows: *Freshman year*, anatomy (osteology), chemistry (inorganic), theoretical and practical, physiology (of digestion), materia medica and therapeutics; *junior year*, physiology (of nutrition), chemical physics, institutes of medicine, therapeutics, gynecology, general and surgical anatomy, principles of surgery, principles of medicine and pathology; *senior year*, practice of medicine, clinical medicine, surgery and clinical surgery, clinical gynecology, obstetrics (clinical and didactic) and puerperal diseases, physiology (special), experimental therapeutics, diseases of children, medical chemistry, otology, ophthalmology, laryngology, medical jurisprudence, dermatology, genito-urinary diseases, topographical anatomy. Students who are not in possession of the degree of a college or university, or of a certificate from a high school or other recognized educational institution, will be required to pass a satisfactory examination for admission. Students who have been admitted to other medical colleges, whose standard of matriculation is recognized by this college, will be matriculated without examination.

The requirements for graduation are as usual.

FEES.—Matriculation, \$5; regular session, \$50; preliminary (optional) term, \$5; graduation, \$20. Chemical and anatomical material "at reasonable rates."

Address James B. Book, M. D., Registrar, 303 Jefferson Avenue, Detroit, Mich.

Minnesota.

MINNESOTA COLLEGE HOSPITAL,

MINNEAPOLIS.

FACULTY.—F. A. DUNSMOOR, M. D. (Dean), Surgery; G. F. FRENCH, M. D., Obstetrics; A. W. ABBOTT, M. D., Anatomy; A. J. STONE, M. D., Diseases of Women; JOHN FULTON, Ph. D., M. D., Diseases of the Eye and Ear; CHARLES A. WHEATON, M. D., Clinical Surgery; W. H. BYFORD, JR., M. D., Physical Diagnosis; T. F. QUINBY, M. D., Materia Medica and Therapeutics; JAY OWENS, M. D., Theory and Practice of Medicine; C. L. WELLS, M. D., Diseases of Children; C. H. HUNTER, M. D., Histology and Pathology; TALBOT JONES, M. D., Physiology; H. J. BURWASH, M. D., Clinical Medicine and Hygiene; W. S. LATON, M. D., Toxicology; CHARLES W. DREW, Ph. B., M. D., Chemistry; C. E. RIGGS, M. D., Nervous Diseases; JAMES QUINN, M. D., Genito-Urinary Diseases; S. S. WENTWORTH, M. D., Dermatology; M. M. FRISSELLE, M. D., D. D. S., Medical and Surgical Dentistry; A. B. CATES, M. D. (Adjunct), Obstetrics; the Hon. EUGENE M. WILSON, Medical Jurisprudence; A. R. BRACKETT, M. D., Demonstrator of Anatomy.

The third regular session will begin October 1, 1883 and will continue five months. There is also a Spring, or Reading and Recitation Term, which begins in April, 1884.

Before matriculation the student must pass an examination in the common English branches, including reading, writing, spelling, grammar, geography, arithmetic, United States history, and so much of physics as is contained in Balfour's "Elementary Physics." Candidates having a degree in arts or sciences, or presenting a certificate from a high school or other institution in good standing, or a teacher's certificate, will be admitted without examination.

REQUIREMENTS FOR GRADUATION.—Every candidate must have dissected each part of the cadaver, in addition to the ordinary requirements.

FEES.—Matriculation, \$5; regular course, \$50; spring term, \$25.

For further information address F. A. Dunsmoor, M. D., Dean, 8 Washington Avenue, South, Minneapolis, Minn.

Missouri.

MISSOURI MEDICAL COLLEGE,

ST. LOUIS, MO.

The secretary informs us that a practical chemical laboratory and a practical course in microscopy have been added, and that the graduation fee has been abolished and a fee for examination instituted in its stead.

FACULTY.—WILLIAM M. MCPHEETERS, M. D., Professor of Materia Medica and Therapeutics (emeritus); JOHN S. MOORE, M. D., Principles of Medicine and Hygiene; G. M. B. MAUGHS, M. D., Obstetrics and Diseases of Women; P. GERVAIS ROBINSON, M. D., Practice of Medicine and Clinical Medicine; J. K. BAUDUY, M. D., LL. D., Psychological Medicine, Diseases of the Nervous System, Clinical Medicine, and Medical Jurisprudence; CHARLES E. MICHEL, M. D., Ophthalmology, Histology, and Pathological Anatomy; H. TUHOLSKE, M. D., Clinical Surgery and Surgical Pathology; OTTO A. WALL, M. D., Ph. G., Materia Medica, Therapeutics, and Pharmacy; C. A. TODD, A. M., M. D., Anatomy and Diseases of the Ear and Throat; J. P. KINGSLEY, M. D. (Secretary), Physiology and (Clinical) Diseases of Children; T. F. PREWITT, M. D. (Dean), Principles and Practice of Surgery and Clinical Surgery; C. O. CURTMAN, M. D., Chemistry; P. V. SCHENCK, M. D., Clinical Lecturer on Gynaecology; C. A. TODD, M. D., Demonstrator of Anatomy; JUSTIN STEER, M. D., Assistant Demonstrator.

ASSISTANTS.—A. B. SHAW, M. D.; F. STUEVER, M. D.; J. R. LEMEN, M. D.; F. R. EVERSOLE, M. D.

The forty-third annual session will begin October 1st and continue five months. The instruction is by clinical and didactic lectures, demonstrations, dissections, operations, etc. Clinics are held in the new Clinical Amphitheatre, at St. John's and the city hospitals, and at the College Dispensary. The faculty have also medical control of St. Bridget's Asylum, St. Joseph's Asylum, and St. Mary's Asylum.

REQUIREMENTS FOR GRADUATION.—Besides the ordinary requirements, the candidate must have attended the dissections and clinics in this school as long as he was a student thereof.

A preliminary examination will be held in accordance with the rules of the State boards.

FEES.—Course of lectures, \$60; matriculation (good until the following March), \$5; dissecting-room, \$10; examination for degree (not returnable), \$30.

For further information address T. F. Prewitt, M. D., Dean, 3718 N. Ninth Street, St. Louis, Mo.

ST. LOUIS MEDICAL COLLEGE,

ST. LOUIS, MO.

THERE have been added to the teaching corps professors of hygiene and medical jurisprudence, and pathological anatomy; also a lecturer on nervous diseases.

FACULTY.—A. LITTON, M. D., Chemistry and Pharmacy; J. B. JOHNSON, M. D., Principles and Practice of Medicine; E. H. GREGORY, M. D., Principles and Practice of Surgery and Clinical Surgery; J. S. B. ALLEYNE, M. D. (Dean), Therapeutics and Materia Medica, and Diseases of Children; E. F. SMITH, M. D., Clinical Medicine and Pathological Anatomy; L. CH. BOISLINIERE, M. D., Obstetrics; G. BAUMGARTEN, M. D., Physiology; H. H. MUDD, M. D., Anatomy and Clinical Surgery; W. E. FISCHER, M. D., Hygiene and Forensic Medicine; R. LUEDEKING, M. D., Pathological Anatomy.

LECTURERS.—JOHN GREEN, M. D., Ophthalmology; W. L. BARRET, M. D., Diseases of Women; J. M. SCOTT, M. D., Clinical Medicine; G. A. MOSES, M. D., Clinical Gynaecology; N. B. CARSON, M. D., Assistant to the Chair of Surgery; W. C. GLASGOW, M. D., Diseases of the Chest and Laryngology; J. FRIEDMAN, M. D., Demonstrator of Chemistry; EDWARD EVERS, M. D., Histology; JOHN P. BRYSON, M. D., Diseases of the Genito-Urinary Organs; W. A. McCANDLESS, M. D., FRANK R. FRY, M. D., Demonstrators of Anatomy; C. H. HUGHES, M. D., Nervous Diseases; HARRY HODGEN, M. D., Curator of the Museum.

The forty-second annual session will begin September 24, 1883, and continue until March 1, 1884. The college obtains its clinical material from the College Dispensary, the City Hospital, and the St. Louis Mullanphy (or Sisters') Hospital. All matriculates are required to pass an examination.

REQUIREMENTS FOR GRADUATION.—Three regular courses of lectures must have been attended.

FEES.—Matriculation fee (paid but once), \$5; fees for each regular term, \$90. Graduates of this institution have perpetual free admission. Graduates of any accredited regular school of medicine will be charged a fee of \$25 for attendance during a winter session.

This college has signified its intention of conforming to the requirements of the Illinois State Board of Health.

For further information address J. S. B. Alleyne, M. D., Dean, 3132 Washington Avenue, St. Louis, Mo.

ST. JOSEPH MEDICAL COLLEGE,

ST. JOSEPH, MO.

WE are informed by the Dean that a chair of puerperal diseases and lectureships on diseases of the nose and throat and on dermatology have been added to the college.

FACULTY.—W. I. HEDDENS, M. D., Gynæcology; C. F. KNIGHT, M. D., Obstetrics and Clinical Midwifery; J. D. SMITH, M. D., Principles and Practice of Surgery and Clinical Surgery; T. H. DOYLE, M. D., Principles and Practice of Medicine and Clinical Medicine; E. A. DONELAN, M. D., Diseases of Women and Children; HIRAM CHRISTOPHER, M. D., Chemistry and (Lecturer on) Diseases of the Nose and Throat; J. M. D. FRANCE, M. D., Materia Medica, Therapeutics, and Medical and Surgical Clinics; JACOB GEIGER, M. D. (Dean), Operative Surgery, Orthopædic Surgery, and Diseases of the Genito-Urinary System; D. I. CHRISTOPHER, M. D., Physiology and Diseases of the Eye and Ear; J. W. HEDDENS, M. D., Anatomy and Clinical Surgery; W. H. BRYANT, M. D., Puerperal Diseases; Hon. JOHN DONIPHAN, Medical Jurisprudence; F. C. HOYT, M. D., Demonstrator of Anatomy and Lecturer on Hygiene; G. C. CATLETT, M. D., Lecturer on Diseases of the Mind and Nervous System; GEORGE NASH, M. D., Dermatology; C. H. DARBY, D. D. S., Dental Surgery.

The seventh annual course will begin October 1st, and will continue five months. The clinics are held in a hospital under the exclusive control of the faculty, also in the St. Joseph City Hospital. Clinical lectures on nervous diseases and insanity are given at the State Lunatic Asylum No. 2 by the superintendent of that institution.

REQUIREMENTS FOR GRADUATION.—Besides the usual requirements, the dissecting ticket must have been taken continuously in this or some other medical school, and the candidate must have followed the practice of a hospital.

FEES.—Matriculation fee (to be paid but once), \$5; full course of lectures, \$35; each ticket, \$10; tickets of the demonstrator, \$10; no extra charge for anatomical material; graduation fee, \$25.

Fee for the Graded Course (three terms).—First year, \$30; second, \$40; third, \$30; graduation fee, \$25.

Further information can be obtained by addressing Jacob Geiger, M. D., Dean, corner Sixth and Francis Streets, St. Joseph, Mo.

ST. LOUIS COLLEGE OF PHYSICIANS AND SURGEONS,

ST. LOUIS.

FACULTY.—LOUIS BAUER, M. D., M. R. C. S. Eng. (Dean), Principles and Practice of Surgery, Clinical Surgery, and Orthopædic Surgery; W. B. HAZARD, M. D. (Registrar), General Pathology and Nervous and Mental Diseases; ALGERNON S. BARNES, M. D., Obstetrics and Diseases of Women; ROBERT M. KING, M. D., Physiology, Histology, and Clinical Medicine; LEONIDAS H. LAIDLEY, M. D., Gynæcology; RUFUS A. VAUGHAN, M. D., Diseases of Children; A. D. WILLIAMS, M. D., Ophthalmology and Otolaryngology; JOHN T. LAREW, M. D., Anatomy and Demonstrator of Anatomy; WILLIAM G. MOORE, M. D., Materia Medica, Therapeutics, and Dermatology; JOSEPH G. LODGE, Esq., Medical Jurisprudence; G. WILEY BROOME, M. D., Clinical Surgery and Fractures and Dislocations; GEORGE W. HALL, M. D., Practice of Medicine and Clinical Medicine; FRANK L. JAMES, M. D., Chemistry and Toxicology; WALDO BRIGGS,

M. D., Lecturer on Minor Surgery and Demonstrator of Operative Surgery; JOHN P. PARDUE, M. D., Lecturer on Hygiene and State Medicine.

The fifth annual course will begin October 8, 1883, and end March 5, 1884. There is also a preliminary course, which began September 10, 1883.

REQUIREMENTS FOR GRADUATION.—Class examinations will be held by each professor at least once a week throughout the term. Annual examinations upon the subjects of the preceding course are held at the beginning of the regular session. If satisfactory, they advance the student to the next higher class and exempt him from further examination upon the branches passed. If not satisfactory, a re-examination will be given at the end of the term.

Students who have attended three courses of lectures in reputable medical schools are not required to present certificates of study from a preceptor.

Candidates for the *ad eundem* degree must present a diploma, with evidence of practice for at least two years. Not more than two honorary diplomas will be conferred annually. Otherwise the requirements are as usual.

FEES.—Matriculation, \$5; lecture tickets (including demonstrators' fees), \$50; examination fee, \$25.

For further information address Professor Louis Bauer, Dean, 519 Pine Street, St. Louis.

Nebraska.

OMAHA MEDICAL COLLEGE,

OMAHA, NEB.

FACULTY.—ROBERT R. LIVINGSTON, M. D. (President), Principles and Practice of Surgery; VICTOR H. COFFMAN, M. D., Principles and Practice of Medicine and Clinical Medicine; GEORGE B. AYRES, M. D. (Secretary), Anatomy, Descriptive and Surgical, Cutaneous and Venereal Diseases; SAMUEL D. MERCER, M. D., Clinical Surgery; P. S. LEISENRING, M. D., Obstetrics; JACOB C. DENISE, M. D., Ophthalmology, Otolaryngology, and Laryngology; RICHARD C. MOORE, M. D., Materia Medica and Therapeutics; A. S. V. MANSFELDE, M. D., Pathology and Histology; G. H. PEEBLES, M. D., Diseases of Children; H. P. MATHEWSON, M. D., Diseases of the Mind; DONALD MACRAE, M. D., Gynæcology; W. S. GIBBS, M. D., Physiology; JAMES CARTER, M. D., Chemistry, Toxicology, and Clinical Medicine; JOHN C. COWIN, Medical Jurisprudence; EWING BROWN, M. D., Demonstrator of Anatomy.

The third regular session will begin October 2, 1883, and close March 21, 1884. All candidates for admission must be possessed of a creditable English education. Women are admitted.

REQUIREMENTS FOR GRADUATION.—Clinical instruction during the entire term of attendance; practical anatomy to the extent of having dissected all regions of the body; the complete course in practical chemistry; close attendance at all lectures.

FEES.—Matriculation, \$5; lecture term, \$35; dissecting ticket (material at cost), \$10; graduation, \$25.

Address George B. Ayres, M. D., Secretary, 1120 Farnam Street, Omaha, Neb.

New Hampshire.**DARTMOUTH MEDICAL COLLEGE**

(MEDICAL DEPARTMENT OF DARTMOUTH COLLEGE),

HANOVER, N. H.

PROFESSOR O. P. HUBBARD, LL. D., has resigned the chair of chemistry and pharmacy, and has been made professor emeritus. Professor E. J. Bartlett has been appointed to the chair formerly occupied by Professor Hubbard, and will teach chemistry principally by laboratory work. Prominence is given to instruction by a Recitation Term of six months, which, though optional, is urgently recommended.

FACULTY.—EDWIN J. BARTLETT, M. D., Chemistry and Pharmacy; JESSE P. BANCROFT, M. D., Mental Diseases; JOHN ORDRONAU, M. D., LL. D., Medical Jurisprudence; CARLTON P. FROST, M. D. (Dean), Science and Practice of Medicine; LOUIS ELSBERG, M. D., Laryngology; EDWARD S. DUNSTER, M. D., Obstetrics; HENRY M. FIELD, M. D., Therapeutics and Materia Medica; WILLIAM W. SEELY, M. D., Ophthalmology; PHINEAS S. CONNER, M. D., Surgery; LYMAN B. HOW, M. D., Anatomy and Physiology; PAUL F. MUNDÉ, M. D., Gynecology; WILLIAM T. SMITH, M. D., Assistant Lecturer on Anatomy and Physiology.

The eighty-seventh annual course began Wednesday, August 1st, and will continue sixteen weeks.

In addition to the regular course, there are shorter courses by the following professors; Professor John Ordronaux, medical jurisprudence; Professor J. P. Bancroft, mental diseases; Professor W. W. Seely, ophthalmology; Professor Louis Elsberg, diseases of the throat.

REQUIREMENTS FOR GRADUATION.—The candidate must, besides the usual requirements, present evidence that he has dissected all parts of the cadaver, and shall pass a written examination. No Thesis is required.

FEES.—Matriculation (paid annually), \$5; for the course, \$77; graduation fee (not returnable), \$25; chemicals and ordinary breakage, \$3; anatomical material at cost. Students who have attended two courses, one of them at this institution, may attend the third on payment of the matriculation fee; of those who have attended two courses at any other regular institution, \$40 will be required in addition to the matriculation fee.

For further information address Carlton P. Frost, M. D., Dean, Hanover, N. H.

New York.**COLLEGE OF PHYSICIANS AND SURGEONS,**

(MEDICAL DEPARTMENT OF COLUMBIA COLLEGE)

IN THE CITY OF NEW YORK.

It is understood that Professor Dalton has retired from the chair of physiology, and that Professor John G. Curtis has succeeded him.

FACULTY.—ALONZO CLARK, M. D., LL. D. (President), Pathology and Practical Medicine (emeritus); WILLARD PARKER, M. D., LL. D., Principles and Practice of Surgery (emeritus); JOHN G. CURTIS, M. D. (secretary), Physiology and Hygiene; THOMAS MASTERS MARKOE, M. D., Principles

of Surgery; WILLIAM DETMOLD, M. D., Clinical and Military Surgery (emeritus); THEODORE GAILLARD THOMAS, M. D., Clinical Gynecology; JOHN THOMAS METCALFE, M. D., Clinical Medicine (emeritus); HENRY BERTON SANDS, M. D., Practice of Surgery; JAMES WOODS McLANE, M. D., Obstetrics, Gynecology, and Diseases of Children; THOMAS TAUNTON SABINE, M. D., Anatomy; CHARLES FREDERIC CHANDLER, Ph. D., Chemistry and Medical Jurisprudence; EDWARD CURTIS, M. D., Materia Medica and Therapeutics; FRANCIS DELAFIELD, M. D., Pathology and Practical Medicine; WILLIAM HENRY DRAPER, M. D., Clinical Medicine.

CLINICAL PROFESSORS.—CORNELIUS REA AGNEW, M. D., Diseases of the Eye and Ear; ABRAHAM JACOBI, M. D., Diseases of Children; FESSENDEN NOTT OTIS, M. D., Venereal Diseases; EDWARD CONSTANT SEGUIN, M. D., Diseases of the Mind and Nervous System; GEORGE MOREWOOD LEFFERTS, M. D., Laryngoscopy and Diseases of the Throat; WILLIAM TILLINGHAST BULL, M. D., Demonstrator of Anatomy; GEORGE HENRY FOX, M. D., Diseases of the Skin; THEOPHILE MITCHELL PRUDDEN, M. D., Director of the Physiological and Pathological Laboratory of the Alumni Association; ROBERT FULTON WEIR, M. D., Surgery; WILLIAM STEWART HALSTED, M. D., First Assistant Demonstrator of Anatomy; FRANCIS HARTMAN MARKOE, M. D., Second Assistant Demonstrator of Anatomy; GEORGE MONTGOMERY TUTTLE, M. D., Assistant to the Chair of Obstetrics.

CLINICAL ASSISTANTS.—John Thomas Kennedy, M. D., Oren Day Pomeroy, M. D., Frank Parker Kinnicutt, M. D., David Webster, M. D., George Gill Wheelock, M. D., Lemuel Bolton Bangs, M. D., Urban Gillespie Hitchcock, M. D., David Magic, M. D., Robert Abbe, M. D., Stuyvesant Fish Morris, M. D., David Bryson Delavan, M. D., William Oliver Moore, M. D., Richard George Wiener, M. D., John Higgins Swasey, M. D., Royal Wells Amidon, M. D., Charles Augustus Kinch, M. D., William Henry Vermilye, M. D., Henry Newton Heineman, M. D., Walter Buckley Johnson, M. D., George Thomas Jackson, M. D., William Randall Birdsall, M. D., Alonzo Blauvelt, M. D., Richard John Hall, M. D., Charles Samuel Ward, M. D., Alexander Sanford Clarke, M. D., James Bradbridge Hunter, M. D., John Frederick Golding, M. D., Francis Huber, M. D., Nelson Herrick Henry, M. D., Frank Watson Jackson, M. D., Theophile Mitchell Prudden, M. D., Curator of the Museum.

The yearly course consists of but one session, of seven months' duration. The seventy-sixth course begins on Monday, October 1, 1883, and lasts until about the 1st of May, 1884.

RECITATIONS.—Teaching by recitation forms a prominent feature of the course, the classes being conducted daily by the following corps of examiners: JOHN GREEN CURTIS, M. D., Physiology. WILLIAM TILLINGHAST BULL, M. D., Surgery. EDWARD GURLEY LOVE, Ph. D., Chemistry. GEORGE LIVINGSTON PEABODY, M. D., Practice of Medicine. ABRAHAM PHILIP ZEMANSKY, M. D., Materia Medica and Therapeutics. EDWARD LASELL PARTRIDGE, M. D., Obstetrics and the Diseases of Women and Children. WILLIAM STEWART HALSTED, M. D., Anatomy. The fee for the course is \$40; for any single branch, \$7. A full course counts as time spent with a preceptor.

PRACTICAL INSTRUCTION.—In addition to the clinics, which are free, private instruction is given as follows:

Normal and Pathological Histology and the Examination of the Urine are taught in the Physiological and Pathological Laboratory of the Alumni Association of the College of Physicians and Surgeons. Instruction is given by Dr. T. M. Prudden, Director of the laboratory, in *practical normal and pathological histology*, in courses of forty lessons each. Fee for each course, \$20. Courses of twenty lessons are given by Dr. H. N. Heineman in the *examination of the urine*. Fee for the course, \$10. Opportunity is afforded to a limited number of students or practitioners to make special or original investigations in the laboratory.

Operative Surgery.—Dr. Charles McBurney gives courses of fourteen lessons to classes of six students, embracing practice on the cadaver. Fee, \$20.

Minor Surgery.—Dr. W. T. Bull gives courses of twelve lessons to classes of eight. Fee, \$15.

Physical Diagnosis.—Dr. A. P. Zemansky gives courses of fifteen lessons to classes of three. Fee, \$20.

Otology.—Dr. G. B. Hickok gives twelve lessons to limited classes at the Eye and Ear Infirmary. Fee, \$12.

Laryngoscopy and Rhinoscopy.—Professor Lefferts superintends courses of twelve lessons by his clinical assistants to limited classes. Fee, \$12.

THE FEES FOR THE SESSION are the same as at the other large colleges. A small charge is made for anatomical material—\$1 for each "part." The dissecting-room is open during the whole course.

REQUIREMENTS FOR GRADUATION.—In the usual statement requiring two full courses, it is specified that the two must not have begun during the same calendar year. Three courses are recommended: the first including physics and chemistry, anatomy, and physiology; the second, all the branches taught; the third, materia medica and therapeutics, pathology and practical medicine, surgery, and obstetrics and gynecology. The faculty state that an immense majority of the students of the college follow this plan. A regular course in dissection is obligatory. Certificates of preceptorship are not accepted from homœopathic, eclectic, or other "irregular" practitioners, even if they are graduates of regular medical schools.

According to the merits of a student's examination (which may be partial, but final in the branches examined in, after two courses) and of his thesis, three results are possible: 1. He is "passed" when his thesis and examinations have been satisfactory in each and all of the seven branches. 2. He is "conditioned" when the average merit has been satisfactory, while in one or more branches he has been found deficient. In this case the candidate can proceed to his degree only on the condition that he first pass a re-examination in the deficient branch or branches, not sooner than at the next regular semi-annual examination. 3. He is "rejected" when the average merit has been unsatisfactory; in this case the candidate must be re-examined in all the seven branches, but the writing of a new thesis is rarely required.

We understand that the examinations are in writing,

and that the personality of the candidate is not known when the decision is given upon his papers.

Communications may be addressed to John G. Curtis, M. D., Secretary of the Faculty, College of Physicians and Surgeons, Twenty-third Street and Fourth Avenue.

ALBANY MEDICAL COLLEGE,

ALBANY, N. Y.

HENRY HUN, M. D., has been appointed lecturer on nervous diseases. In our issue of August 18, 1883, we recorded the death of Jacob S. Mosher, M. D., who occupied the chair of pathology, practice, clinical medicine, and hygiene. We are not informed that an appointment has been made to fill the vacancy caused by the death of Dr. Mosher.

FACULTY.—THOMAS HUN, M. D., LL. D. (Dean), Institutes of Medicine (emeritus); SAMUEL O. VANDER POEL, M. D., LL. D., Pathology, Practice, and Clinical Medicine (emeritus); ALBERT VAN DERVEER, M. D., Ph. D., Principles and Practice of Surgery and Clinical Surgery; ———, Pathology, Practice, Clinical Medicine, and Hygiene; MAURICE PERKINS, M. D., Chemical Philosophy and Organic Chemistry; JOHN M. BIGELOW, M. D., Materia Medica, Therapeutics, Diseases of the Throat, and Clinical Laryngoscopy; LEWIS BALCH, M. D., Ph. D., Anatomy; SAMUEL B. WARD, M. D., Ph. D., Surgical Pathology, Operative and Clinical Surgery; JOHN P. GRAY, M. D., LL. D., Psychological Medicine; JAMES P. BOYD, M. D., Obstetrics and Diseases of Women and Children; WILLIS G. TUCKER, M. D., Ph. D. (Registrar), Inorganic and Analytical Chemistry and Medical Jurisprudence; WILLIAM HAILES, M. D., Histology and Pathological Anatomy; CYRUS S. MERRILL, M. D., Ophthalmology and Otology; SAMUEL O. VAN DER POEL, JR., M. D. (Adjunct), Pathology, Practice, and Clinical Medicine; FRANKLIN TOWNSEND, M. D., Physiology; FREDERIC C. CURTIS, M. D. (Adjunct), Dermatology; HENRY HUN, M. D., Lecturer on Nervous Diseases; EUGENE VAN SLYKE, M. D., Demonstrator of Anatomy.

The fifty-second winter session began September 11, 1883, and will continue until March 5, 1884. The course was lengthened four weeks with the session of 1882-'83, and the spring session was abolished. The three years' course includes two full courses upon each subject, as follows: *First year*, anatomy, materia medica, physiology, chemistry, practical anatomy, and laboratory courses in chemistry and histology, *second year*, the full course of lectures, and the *third year*, theory and practice, surgery, obstetrics, and the allied branches.

REQUIREMENTS FOR GRADUATION.—A three years' graded course of lectures in this college, or the equivalent of the first two courses thereof elsewhere, and the last course in this college; the usual requirements in addition.

The final examinations are in writing.

FEES.—Matriculation (yearly), \$5; lecture tickets, \$100 dissection, \$10; graduation, \$25; chemical laboratory (each course), \$10; laboratory course in histology (each course) \$10.

This college will conform to the requirements of the Illinois State Board of Health. Address Willis G. Tucker, M. D., Registrar, 4 Lancaster Street, Albany, N. Y.

MEDICAL DEPARTMENT OF THE
UNIVERSITY OF BUFFALO,
BUFFALO, N. Y.

Dr. E. M. MOORE, Professor of Surgery, has resigned, and Dr. Roswell Park has been appointed to the chair. Dr. Julius F. Miner, Emeritus Professor of Operative and Clinical Surgery, has resigned, and his work has been divided among the recently appointed special lecturers.

FACULTY.—THOMAS F. ROCHESTER, M. D., Principles and Practice of Medicine and Clinical Medicine; WILLIAM H. MASON, M. D., Physiology and Microscopy; E. V. STODDARD, M. D., Materia Medica and Hygiene; CHARLES CARY, M. D., Anatomy; MATTHEW D. MANN, M. D., Obstetrics and Gynecology; RUDOLPH A. WITTHAUS, M. D., Chemistry and Toxicology; ROSWELL PARK, M. D., Lecturer on the Principles and Practice of Surgery and Clinical Surgery; JUDSON B. ANDREWS, M. D., Lecturer on Insanity; LUCIEN HOWE, M. D., Lecturer on Ophthalmology and Otology; MAHLON B. FOLWELL, M. D., Lecturer on Dermatology and Syphilis; FREDERICK PETERSON, M. D., Lecturer on Pathology; D. W. HARRINGTON, M. D., Clinical Lecturer on Surgery; WILLIAM H. HEATH, M. D., Clinical Lecturer on Genito-Urinary Diseases; WILLIAM C. PHELPS, M. D., Demonstrator of Anatomy.

The thirty-eighth annual course will begin September 27, 1883, and will continue twenty-two weeks.

REQUIREMENTS FOR GRADUATION.—The degree is conferred upon the joint recommendation of the faculty and the curators. Dissection during one course is required.

FEES.—Matriculation (annually), \$5; tickets of all the professors amount to \$100; perpetual ticket, \$150; graduation, \$25; demonstrator, \$10, including material.

For further information address Charles Cary, M. D., 210 Delaware Avenue, Buffalo, N. Y.

BELLEVUE HOSPITAL MEDICAL COLLEGE,
NEW YORK.

DURING the year the faculty of this college have met with a serious loss in the death of Professor Van Buren, who held the chair of surgery. In the spring Dr. Joseph W. Howe resigned his position as Clinical Professor of Surgery. With these exceptions, there have been no noteworthy changes in the teaching corps, which is now constituted as follows:

FACULTY.—ISAAC E. TAYLOR, M. D. (President), Obstetrics and Diseases of Women and Children (emeritus); FORDYCE BARKER, M. D., LL. D., Clinical Midwifery and Diseases of Women; BENJAMIN W. MCCREADY, M. D., Materia Medica and Therapeutics (emeritus); AUSTIN FLINT, M. D., LL. D., Principles and Practice of Medicine and Clinical Medicine; FREDERIC S. DENNIS, M. D., Principles and Practice of Surgery and Clinical Surgery; LEWIS A. SAYRE, M. D., Orthopædic Surgery and Clinical Surgery; ALEXANDER B. MOTT, M. D., Clinical and Operative Surgery; WILLIAM T. LUSK, M. D., Obstetrics and Diseases of Women and Children and Clinical Midwifery; A. A. SMITH,

M. D., Materia Medica and Therapeutics and Clinical Medicine; AUSTIN FLINT, JR., M. D. (Secretary), Physiology and Physiological Anatomy; JOSEPH D. BRYANT, M. D., Anatomy and Clinical Surgery and (Associate) Orthopædic Surgery; R. OGDEN DOREMUS, M. D., LL. D., Chemistry and Toxicology; EDWARD G. JANEWAY, M. D., Diseases of the Nervous System and Clinical Medicine and (Associate) Principles and Practice of Medicine.

PROFESSORS OF SPECIAL DEPARTMENTS.—HENRY D. NOYES, M. D., Ophthalmology and Otology; EDWARD L. KEYES, M. D., Cutaneous and Genito-Urinary Diseases; JOHN P. GRAY, M. D., LL. D., Psychological Medicine and Medical Jurisprudence; WILLIAM H. WELCH, M. D., Pathological Anatomy and General Pathology and Demonstrator of Anatomy; J. LEWIS SMITH, M. D., Clinical Professor of Diseases of Children; CHARLES A. DOREMUS, M. D., Ph. D., Professor Adjunct to the Chair of Chemistry and Toxicology; BEVERLEY ROBINSON, M. D., Clinical Professor of Medicine; FRANCKE H. BOSWORTH, M. D., Diseases of the Throat.

OTHER INSTRUCTORS.—J. E. ALLEN, M. D., J. B. ISHAM, M. D., C. G. BULL, M. D., H. M. SILVER, M. D., Assistant Demonstrators of Anatomy; WILLIAM H. FLINT, M. D., Principles and Practice of Medicine; LEWIS HALL SAYRE, M. D., Orthopædic Surgery; JAMES R. TAYLOR, M. D., VALENTINE MOTT, M. D., Clinical and Operative Surgery; WILLIAM B. ANDERTON, M. D., BUCHANAN BURR, M. D., Obstetrics; RICHARD KALISH, M. D., Materia Medica and Therapeutics; CHARLES F. ROBERTS, M. D., J. A. TEN EYCK, JR., M. D., Physiology; A. H. DOTY, M. D., C. G. BULL, M. D., S. H. PINKERTON, M. D., Prosectors in Anatomy; L. PUTZEL, M. D., GASPAR GRISWOLD, M. D., Diseases of the Nervous System; W. F. MITTENDORF, M. D., H. S. OPPENHEIMER, M. D., Ophthalmology; LEGRAND N. DENSLOW, M. D., Cutaneous Diseases; HENRY D. CHAPIN, M. D., Diseases of Children.

FACULTY FOR THE SPRING SESSION.—FREDERICK A. CASTLE, M. D., Pharmacology; WILLIAM H. WELCH, M. D., Pathological Histology; T. HERRING BURCHARD, M. D., Surgical Emergencies; CHARLES S. BULL, M. D., Ophthalmology and Otology; LEROY MILTON YALE, M. D., Diseases of the Joints.

The twenty-third regular session begins on Wednesday, September 19, 1883, and extends to the latter part of March, 1884. At its close, the spring session begins, and lasts until about the middle of June.

Weekly examinations are held by the faculty. These examinations (commonly called quizzes) are for the graduating class only, but all the students are allowed to be present. The examinations are free. In addition, special practical instruction is given to candidates for graduation by practical exercises in medicine, surgery, gynecology, ophthalmology, and otology. These exercises are designed especially for third-course students who have passed their final examinations in the elementary branches. They are extended, however, to all candidates for graduation, so far as practicable without preventing them from attending the didactic lectures. In addition to these practical exercises, courses of private instruction, not included in the general

curriculum, designed for graduates and under-graduates, are given as follows:

Medical Diagnosis.—Professor Janeway, medical diagnosis, with special reference to diseases of the chest and abdomen, private classes of fifteen. Twenty lessons, \$20. Professor A. A. Smith, assisted by Dr. W. H. Katzenbach, physical diagnosis, private classes of fifteen. Twenty lessons, \$20.

Surgical Operations.—Professor Dennis, private classes of four. Fifteen lessons, \$15. Professor Mott, surgical operations, private classes of ten, \$30.

Operative Surgery and Surgical Dressings.—Professor Bryant, private classes of six. Twenty-five lessons, \$20.

Physiological Laboratory.—Professor Flint, Jr., receives five students into the Physiological Laboratory, who act as assistants during the winter session. The fee is \$50.

Practical Chemistry.—The Chemical Laboratory is open to students every Saturday afternoon. Instruction is given by Professor Doremus, with the assistance of Adjunct Professor C. A. Doremus. The course comprises the chemical examination of the urine in health and disease. The fee for this course is \$10.

Diseases of the Eye and Ear.—Professor Noyes, assisted by Dr. C. S. Bull, at the School of Ophthalmology and Otology connected with the New York Eye and Ear Infirmary. The fee for either the winter or the spring course is \$30, for the separate branches, \$10 each.

Pathological Laboratory.—Professor Welch, normal and pathological histology. About twenty-five lessons, to classes of twelve, \$15.

Diseases of the Heart, Lungs, and Throat.—Professor Robinson, private classes of six. Twelve lessons, \$12.

Laryngoscopy and Diseases of the Throat.—Professor Bosworth, private classes of ten. Twenty-five lessons, \$10.

Diseases of Women.—Dr. Frederick A. Castle, private classes of two. Twelve lessons, \$50.*

FEES FOR THE WINTER SESSION.—The tickets may be taken out separately, at \$20 each, or all seven at once for \$140. The surgery ticket covers cutaneous and genito-urinary diseases and orthopædic surgery. The matriculation ticket, \$5, must be taken before any of the lecture tickets can be had. It admits the bearer to all the clinical lectures and to the public hospitals. The dissection ticket is \$10, which covers all charges for the practical study of anatomy. The graduation fee is \$30. Graduates, and students who have attended two full courses, are given all the tickets except the matriculation and dissection tickets at \$10 each. All the lecture tickets must be paid for at the beginning of the term.

REQUIREMENTS FOR GRADUATION.—Candidates must be twenty-one years of age; must have studied three years, after the age of eighteen, with a regular physician, or regular physicians, in good standing, inclusive of the time spent in attending medical lectures; must have attended two full courses of lectures, the last being in this college; must pre-

sent certificates of at least one course of dissections at this or some other accredited college empowered to confer the degree of M. D.; must have proper testimonials of character; and must pass a satisfactory examination in each of the seven departments of instruction—viz., practice of medicine, surgery, obstetrics, materia medica and therapeutics, physiology, anatomy, and chemistry. The examinations upon practice of medicine and surgery include diseases of the nervous system, pathological anatomy, ophthalmology, and diseases of the skin. Two full courses of lectures are absolutely required, and no period of practice is taken as an equivalent for one course.

The only courses of lectures recognized are those taken at regularly organized colleges empowered to confer the degree of M. D., the courses embracing practice of medicine, surgery, obstetrics, materia medica and therapeutics, physiology, anatomy, and chemistry. The tickets and diplomas of eclectic, homœopathic, or botanic colleges, or colleges devoted to any peculiar system of medicine, are not recognized. Certificates from preceptors who assume to be practitioners of any peculiar system of medicine, or who advertise, thus violating the code of ethics adopted by the American Medical Association, are not received.

Graduates of other accredited colleges are examined in all the departments, the same as under-graduates, and must fulfill all of the requirements demanded of under-graduates. If of three or more years' standing, the graduate must show a certificate of membership in some society entitled to representation in the American Medical Association. Such candidates are expected to matriculate, to take out tickets for the winter session, to attend lectures during the session, and to pay the graduation fee of \$30.

Third-course students who have taken graded courses at other accredited medical colleges, and present certificates from such colleges of having passed their examinations in any or all of the subjects of materia medica and therapeutics, physiology, anatomy, and chemistry, may be examined at the close of the session in those subjects only in which they have not already passed—thus enabling them to devote special attention to the practical branches; but they must take out all the tickets.

Students who have attended two full winter courses may be examined in the elementary branches, and, if successful, they will be examined at the end of the third course in the practical branches only. For this primary examination half the graduation fee must be paid, the remainder to be paid before the final examination. Between the two examinations another full course of lectures must be attended.

SPRING SESSION—RECITATIONS AND LECTURES.—The recitations are under the direction of Dr. H. Goldthwaite, and Professors Dennis, Welch, and C. A. Doremus. The ticket to the recitations and lectures is \$40.

Communications relating to the business of the college should be addressed to the secretary of the faculty, Professor Austin Flint, Jr., Bellevue Hospital Medical College, New York City.

* These private courses are intended mainly for the benefit of practitioners and others who desire to pursue special studies, and are not included in the requirements for graduation.

MEDICAL DEPARTMENT OF THE UNIVERSITY OF THE CITY OF NEW YORK.

SINCE the opening of the last annual session Professor J. W. S. Arnold has retired from the actual duties of the chair of physiology and histology, but retains a connection with the faculty as professor emeritus of those branches. Professor Stimson succeeds Professor Arnold, and Dr. S. O. Van der Poel has been added to the faculty as professor of public hygiene. A considerable addition has been made to the building, rendering it now, the faculty state, the largest of its kind in the country. A dispensary has been added.

FACULTY.—ALFRED C. POST, M. D., LL. D. (President), Clinical Surgery (emeritus); CHARLES INSLEE PARDEE, M. D. (dean), Otology; J. W. S. ARNOLD, M. D., Physiology and Histology (emeritus); JOHN C. DRAPER, M. D., LL. D., Chemistry; ALFRED L. LOOMIS, M. D., Pathology and Practice of Medicine; WILLIAM DARLING, M. D., LL. D., F. R. C. S., General and Descriptive Anatomy; WILLIAM H. THOMSON, M. D., Materia Medica and Therapeutics, and Diseases of the Nervous System; J. WILLISTON WRIGHT, M. D., Surgery; WILLIAM M. POLK, M. D., Obstetrics and Diseases of Women and Children; S. OAKLEY VAN DER POEL, M. D., LL. D., Public Hygiene; LEWIS A. STIMSON, M. D., Physiology and Histology, Clinical Lecturer on Surgery; STEPHEN SMITH, M. D., Clinical Surgery; A. E. MACDONALD, LL. B., M. D., Medical Jurisprudence and Diseases of the Mind; HERMAN KNAPP, M. D., Ophthalmology; FANEUIL D. WEISSE, M. D., Practical and Surgical Anatomy; R. A. WITTHAUS, M. D., Physiological Chemistry; AMBROSE L. RANNEY, M. D., Curator of Museum; JOSEPH E. WINTERS, M. D., Demonstrator of Anatomy.

ADJUNCT LECTURERS.—F. R. S. DRAKE, M. D., Practice of Medicine; N. M. SHAFFER, M. D., Orthopædic Surgery; JOSEPH E. WINTERS, M. D., Diseases of Children; WILLIAM C. JARVIS, M. D., Laryngology; LAURENCE JOHNSON, M. D., Medical Botany; P. A. MORROW, M. D., Dermatology.

LABORATORY INSTRUCTORS.—WESLEY M. CARPENTER, M. D., MAURICE N. MILLER, M. D., FRANZ HEUEL, JR., M. D., JOHN B. KNAPP, M. D., LEIGH H. HUNT, M. D., IVIN SICKELS, M. D., ADOLPH W. BERLE, B. S., WILLIAM FRANCIS GIBB, B. S., GEORGE C. POPE, B. S., E. ELIOT HARRIS, M. D.

CLINICAL ASSISTANTS.—J. H. HINTON, M. D., ROBERT MILBANK, M. D., WALTER L. RANNEY, M. D., S. W. SMITH, M. D., H. B. CONRAD, M. D., J. HABIRSHAW, M. D., J. C. HALSTEAD, M. D., E. HEUEL, M. D., JOHN F. RIDLON, M. D., E. R. FISHER, M. D., W. H. M. MCENROE, M. D., ROBERT A. MURRAY, M. D., C. P. R. SCHOENEMANN, M. D., WICKES WASHBURN, M. D., D. A. HARRISON, M. D., W. T. WARDWELL, M. D., GEORGE W. LEONARD, M. D., JOHN WARREN, M. D., N. G. MCMASTER, M. D., FRANCIS VALK, M. D.

The preliminary term begins on Wednesday, September 19, 1883, and extends to the beginning of the regular winter course, October 3d. The spring session begins at the close of the winter course, the middle of March, 1884, and continues for ten weeks. Only the winter course is obligatory.

BEDSIDE AND LABORATORY INSTRUCTION.—The graduating class is divided into sections of about twenty-five each, which receive separate instruction for one or two hours daily throughout the term.

The dissecting-room is open from the beginning of the preliminary term to the middle of May. Practical instruction in post-mortem examinations is given at Bellevue Hospital.

Evening examinations are held every week by Professors Draper, Loomis, Thomson, Darling, Wright, Polk, and Stimson. They are free to all the students.

The following optional courses of private instruction are given: Physical diagnosis, Professor Loomis; medical diagnosis, Professor Thomson; operative surgery and surgical dressing, Professor Wright; obstetrical operations and gynaecology, Professor Polk; ophthalmology, Professor Knapp.

The fees for the winter session are the same as at the Bellevue Hospital Medical College. There is a fund for assisting a limited number of needy students, preferably the sons of physicians or clergymen, who pay \$43 for the winter session, together with the matriculation fee. There are ten scholarships.

REQUIREMENTS FOR GRADUATION.—These are practically the same as at the other large colleges. At least one course in practical anatomy must have been taken. The final examination is in writing. Students who have attended two full courses of lectures, and who have completed two years of study, may be admitted to examination in chemistry, anatomy, and physiology, and, if successful, will be examined, at the expiration of their full course of study, on practice, materia medica and therapeutics, surgery, and obstetrics.

Communications may be addressed to Professor Charles Inslee Pardee, M. D., Dean, 410 East Twenty-sixth Street.

COLLEGE OF MEDICINE, SYRACUSE UNIVERSITY,

SYRACUSE, N. Y.

The death of Harvey B. Wilder, M. D., lecturer on insanity, has rendered that chair vacant, but we understand that an appointment to fill it will soon be made.

FACULTY.—FREDERICK HYDE, M. D. (Dean), Principles and Practice of Surgery; HENRY D. DIDAMA, M. D., Principles and Practice of Medicine and Clinical Medicine; NELSON NIVISON, M. D., Physiology, Pathology, and Hygiene; WILFRED W. PORTER, M. D., Obstetrics and Gynaecology; WILLIAM T. PLANT, M. D. (Registrar), Diseases of Children and Clinical Medicine; ROGER W. PEASE, M. D., Operative and Clinical Surgery; ALFRED MERCER, M. D., Minor and Clinical Surgery; W. MANLIUS SMITH, M. D., Chemistry and Botany; JOHN VAN DUYN, M. D., Ophthalmology and Otology; J. GILBERT JUSTIN, M. D., Forensic Medicine; GAYLORD P. CLARK, M. D., Anatomy; ———, Lecturer on Insanity; DAVID M. TOTMAN, M. D., Lecturer on Physiology; A. CLIFFORD MERCER, M. D., Lecturer on Microscopy and Histology.

Instructors.—WALTER SMITH, Chemistry; FREDERICK

W. SMITH, M. D., Anatomy; HENRY L. ELSNER, M. D., Practice of Medicine; W. H. DUNLAP, M. D., Materia Medica and Therapeutics.

The first term of the twelfth college year will begin October 2, 1883, and end February 1, 1884. The second term will begin February 26, 1884, and continue until June 5th.

The studies of the *first year* are anatomy, physiology, chemistry, microscopy, histology, and botany; *second year*, anatomy, physiology, medical chemistry, materia medica, practice, surgery, pathology, and clinics; *third year*, therapeutics, practice, surgery, obstetrics, diseases of children, pathology, gynecology, forensic medicine, ophthalmology, and clinics.

REQUIREMENTS FOR GRADUATION.—In addition to the usual requirements, the student must pass the regular examinations of the first, second, and third years, or present certificates of similar examinations elsewhere.

FEES.—Matriculation, \$5; practical anatomy, \$10; tuition for the year, \$100; either term alone, \$65; graduation, \$25.

The college conforms to the requirements of the Illinois State Board of Health. Address William T. Plant, M. D., Registrar, Syracuse, N. Y.

LONG ISLAND COLLEGE HOSPITAL,

BROOKLYN, N. Y.

The faculty express the belief that they have succeeded better in practically uniting a medical school with a hospital than any other institution in this country, since all the instruction is given in the hospital building.

FACULTY.—SAMUEL G. ARMOR, M. D., LL. D. (Dean), Principles and Practice of Medicine and Clinical Medicine; GEORGE W. PLYMPTON, M. D., Physics, Chemistry, and Toxicology; CORYDON L. FORD, M. D., LL. D., Anatomy; ALEXANDER J. C. SKENE, M. D., Diseases of Women; JARVIS S. WIGHT, M. D. (Registrar), Operative and Clinical Surgery; JOSEPH H. RAYMOND, M. D., Physiology and Sanitary Science; EDWARD SEAMAN BUNKER, M. D., Histology and General Pathology; JOHN D. RUSHMORE, M. D., Surgery; JOHN A. McCORKLE, M. D., Materia Medica, Therapeutics, and Clinical Medicine; CHARLES JEWETT, M. D., Obstetrics and Diseases of Children.

LECTURERS ON SPECIAL SUBJECTS.—JONATHAN S. PROUT, M. D., Diseases of the Eye; ARTHUR MATHEWSON, M. D., Diseases of the Ear; SAMUEL SHERWELL, M. D., Diseases of the Skin; THOMAS R. FRENCH, M. D., Laryngology; HENRY N. READ, M. D., Diseases of Children; FRANCIS H. STUART, M. D., Obstetrics; ELIAS H. BARTLEY, M. D., Physiological and Practical Chemistry; GEORGE H. ATKINSON, M. D., Genito-Urinary Diseases; FRANK E. WEST, M. D., Physical Diagnosis and Diseases of the Kidney; EDWIN A. LEWIS, M. D., Anatomy; JOHN C. SHAW, M. D., Diseases of the Nervous System; ———, Medical Jurisprudence; FRANK MADDEN, M. D., Demonstrator of Anatomy.

LECTURERS OF THE PRELIMINARY TERM.—JOSEPH H. RAYMOND, M. D., Physiology; EDWARD S. BUNKER, M. D., Histology and General Pathology; JEROME WALKER,

M. D., Diseases of Children; FRANCIS H. STUART, M. D., Obstetrics; GEORGE W. CUSHING, M. D., Gynecology; ELIAS H. BARTLEY, M. D., Chemistry; GEORGE H. ATKINSON, M. D., Principles of Surgery; FRANK E. WEST, M. D., Principles of Medicine; CHARLES E. DE LA VERGNE, M. D., Materia Medica; HENRY W. RAND, M. D., Surgical Pathology; EDWIN A. LEWIS, M. D., Anatomy; JOHN C. SHAW, M. D., Anatomy and Physiology of the Nervous System; FRANK MADDEN, M. D., Demonstrator of Anatomy.

CLINICAL ASSISTANTS.—GEORGE W. CUSHING, M. D.; JEROME WALKER, M. D.; FRANK E. WEST, M. D.; THOMAS M. ROCHESTER, M. D.; JOSEPH H. HUNT, M. D.; ELIAS H. BARTLEY, M. D.; HENRY W. RAND, M. D.; JOHN F. McETTRICK, M. D.; GEORGE DRURY, M. D.; HENRY L. COCHRAN, M. D.

The collegiate year is divided into two terms—the preliminary and the regular term. The elementary branches are taught in the former mainly by recitations, the students being divided into three grades. At present the graded course is optional. The preliminary term begins September 19, 1883, and the regular term January 2, 1884. The annual commencement takes place May 21, 1884.

REQUIREMENTS FOR GRADUATION.—In addition to the usual requirements, practical anatomy to the extent of having dissected every region of the body, and laboratory courses in chemistry, histology, and pathology. The examination is both oral and in writing. No Thesis is required.

FEES.—Yearly matriculation, \$5; preliminary term, \$40; regular term, \$100; demonstrator's ticket, \$5; graduation, \$25; practical chemistry, \$5.

For further information, address Dr. Samuel G. Armor, Dean, Mansion House, Brooklyn.

WOMAN'S MEDICAL COLLEGE

OF THE NEW YORK INFIRMARY.

FACULTY AND INSTRUCTORS.—ELIZABETH BLACKWELL, M. D., Hygiene (emeritus); JAMES R. LEAMING, M. D., Principles and Practice of Medicine (emeritus); EMILY BLACKWELL, M. D., Obstetrics and Gynecology; GERARDUS H. WYNKOOP, M. D., Surgery; MARY PUTNAM JACOB, M. D., Materia Medica and Therapeutics; EDWARD H. JANES, M. D., Hygiene; MARY WATTLES FAUNCE, M. D., Anatomy; A. R. ROBINSON, M. D., Histology; C. L. DANA, M. D., Physiology; HENRY N. HEINEMAN, M. D., Principles and Practice of Medicine; T. M. CHIESMAN, JR., M. D., Demonstrator; S. M. ROBERTS, M. D., (Clinical) Diseases of Children; D. M. STIMSON, M. D., (Clinical) Surgery; E. B. BRONSON, M. D., (Clinical) Diseases of the Skin; A. B. JUDSON, M. D., Lecturer on Orthopedic Surgery; ELIZABETH M. CUSHIER, M. D., Lecturer Adjunct on Obstetrics; R. W. AMIDON, M. D., Lecturer Adjunct on Therapeutics; W. R. BIRDSALL, M. D., Lecturer on Nervous Diseases; JOSEPHINE CHEVALIER, Lecturer on Chemistry and Laboratory Instructor; SARAH J. McNUTT, M. D., Instructor in Surgery; MARY T. BISSELL, M. D., Instructor in Physiology; JOSEPHINE WALTER, M. D., Instructor in Practice; GRACE PECKHAM, M. D., Instructor in Obstetrics.

The college year consists of a session of eight months,

beginning on the 1st of October and ending with the last day in May.

A preliminary examination is required of applicants who do not show a certificate from a literary institution. Students must attend three entire sessions, graded as follows: *First year*, anatomy, chemistry, physiology, materia medica, and practical work in the anatomical rooms and chemical laboratory; *second year*, the same, also histology, obstetrics, surgery, practice, therapeutics, and hygiene; *third year*, the latter departments continued, and practical medical work under the direction of the teachers, with clinical reports of cases attended. Students desiring to take a four-years' course will confer with the Secretary on matriculating, and be instructed how to proceed.

REQUIREMENTS FOR GRADUATION.—Three winter sessions of lectures, with clinical instruction according to the course laid down; satisfactory examinations before the Faculty and Board of Examiners.

FEES.—Matriculation, \$5; demonstrator's ticket, \$10; professors' tickets, each \$15, \$105; graduation, \$30.

The college complies with the requirements of the Illinois State Board of Health.

Address Mercy N. Baker, M. D., Secretary of the College, 128 Second Avenue.

Ohio.

MEDICAL COLLEGE OF OHIO,

CINCINNATI.

FACULTY.—W. W. SEELY, M. D. (Dean), Diseases of the Eye and Ear; P. S. CONNER, M. D., Anatomy and Clinical Surgery; SAMUEL NICKLES, M. D., Materia Medica and Therapeutics and Clinical Medicine; JAMES T. WHITTAKER, M. D., Theory and Practice of Medicine and Clinical Medicine; W. W. DAWSON, M. D., Principles and Practice of Surgery and Clinical Surgery; T. A. REAMY, M. D., Obstetrics and Diseases of Children and Clinical Midwifery; C. D. PALMER, M. D., Medical and Surgical Diseases of Women and Clinical Gynecology; F. FORCHHEIMER, M. D., Physiology and Diseases of Children; JOSEPH RANSOHOFF, M. D., F. R. C. S. Eng., Descriptive Anatomy and Clinical Surgery; JAMES G. HYNDMAN, M. D. (Secretary), Medical Chemistry and Clinical Laryngology; FREDERIC KEBLER, M. D., Lecturer on Pathology and Demonstrator of Histology; J. L. CILLEY, M. D., Lecturer on Osteology and Demonstrator of Anatomy; EDWARD W. WALKER, M. D., Lecturer on Morbid Anatomy and Demonstrator of Pathology; FR. A. ROEDER, Ph. D., M. D., Demonstrator of Chemistry; CHARLES F. LOCKE, M. D., FRANK CALDWELL, M. D., Assistant Demonstrators of Anatomy.

ASSISTANTS.—E. G. ZINKE, M. D., Gynecology; GILES S. MITCHELL, M. D., Obstetrics; JAMES M. FRENCH, M. D., Practice; FRANK CALDWELL, Ph. D., M. D., C. W. TANGEMAN, M. D., Ophthalmology; B. F. BEEBE, M. D., Physiology; L. J. KROUSE, M. D., Descriptive Anatomy; HERMAN WILFERT, M. D., Materia Medica; T. R. COFFMAN, M. D., Surgery.

The sixty-fifth annual session will begin September 18, 1883, and continue until March 1, 1884.

REQUIREMENTS FOR GRADUATION.—These are in accordance with the "Articles of Confederation" of the American Medical College Association.

FEES.—Professors' tickets, \$75; matriculation, \$5; dissection, \$5; practical chemistry, \$5; hospital tickets (each), \$5; graduation, \$25.

Address Professor J. G. Hyndman, Secretary, 22 West Ninth Street, Cincinnati.

CINCINNATI COLLEGE OF MEDICINE AND SURGERY,

CINCINNATI.

FACULTY.—R. C. STOCKTON REED, M. D., Materia Medica, Therapeutics, and State Medicine; WILLIAM JUDKINS, M. D., Principles and Practice of Medicine, and (Clinical) Genito-Urinary and Venereal Diseases; C. A. LEE REED, M. D., Obstetrics and Gynecology, and (Clinical) Diseases of Women; GEORGE B. ORR, M. D., Principles and Practice of Surgery and Clinical Surgery; J. H. HAZARD, M. D., Physiology; JOHN BOHLANDER, M. D., Chemistry and Toxicology; W. A. MARTIN, M. D., Anatomy; M. L. AMICK, M. D., Anatomy and Histology of the Nervous System; W. R. AMICK, M. D., Ophthalmology and Otology; ANDERSON N. ELLIS, M. D., Laryngology; JOSEPH T. WALLINGFORD, M. D., Diseases of Children, and (Adjunct) Midwifery; W. K. BOYLAN, M. D., Materia Medica and Therapeutics; D. W. CLANCEY, M. D., D. D. S., Oral Surgery; JOHN REED, M. D., Demonstrator of Anatomy; JOHN BOHLANDER, M. D., Demonstrator of Chemistry.

The forty-ninth regular session begins October 2, 1883, and will continue until the latter part of March, 1884. There will be no preliminary course. By an optional graded course students entering with the purpose of attending three courses may have their instruction graded so that at the end of the second session they may be examined in anatomy, physiology, chemistry, materia medica, and therapeutics; and the examination upon these, if satisfactory, will be final. In such cases, the last examination will be only upon the remaining studies.

REQUIREMENTS FOR GRADUATION.—Practical anatomy will be required, and attendance at the hospital clinics at least one session.

FEES.—General ticket, \$35; matriculation, \$5; demonstrator's ticket (including material), \$10; hospital ticket, \$5; graduation, \$25.

Address J. T. Wallingford, Secretary, 211 Baymiller Street, Cincinnati, Ohio.

STARLING MEDICAL COLLEGE,

COLUMBUS, OHIO.

FACULTY.—STARLING LOVING, M. D. (Dean), Theory and Practice of Medicine; JOHN M. WHEATON, A. M., M. D., Anatomy; E. B. FULLERTON, M. D., Materia Medica and Therapeutics; OTTO FRANKENBERG, M. D., Pathological Anatomy; ALEXANDER DUNLAP, A. M., M. D., Surgical Diseases of Women; W. J. CONKLIN, A. M., M. D., Diseases of Children; HENRY G. LANDIS, A. M., M. D., Obstetrics and Diseases of Women; D. TOD GILLIAM, M. D., Physiology;

DAVIS HALDERMAN, M. D., Surgery; CURTIS C. HOWARD, M. Se., Chemistry and Toxicology; T. C. HOOVER, M. D., Surgical Anatomy and Operative Surgery; ALBERT M. BLEILE, M. D., Experimental Physiology and Histology; HENRY G. CORNWELL, M. D. (registrar), Ophthalmology and Otology; GILBERT H. STEWART, Esq., Medical Jurisprudence; NELSON OBETZ, M. D., Demonstrator of Anatomy.

The thirty-seventh annual course began September 12, 1883, and will continue until February 26, 1884.

The voluntary system of graded instruction has been restored. Students who attend three full courses at this college may be examined at the end of the second year upon anatomy, chemistry, physiology, and materia medica. Attendance upon three years' lectures does not entail additional fees, there being no charge, except for matriculation, during the third year.

REQUIREMENTS FOR GRADUATION.—Besides the usual requirements, at least one course of dissection.

FEES.—Matriculation, \$5; professors' tickets, \$40; laboratory fee (paid but once), \$5; demonstrator's ticket, \$5; final examination fee, \$25.

For further information address Starling Loving, M. D., Dean, 72 East Gay Street, Columbus, Ohio.

MIAMI MEDICAL COLLEGE,

CINCINNATI.

DR. W. A. DUN has been appointed teacher of histology, vice Professor Joseph Eichberg, who confines himself to physiology.

FACULTY.—JOHN A. MURPHY, M. D., Clinical Medicine; W. H. MUSSEY, M. D., Operative and Clinical Surgery, and Surgical Diseases of Women; E. WILLIAMS, M. D., Ophthalmology, Aural Surgery, and Clinical Ophthalmology; W. CLENDENIN, M. D. (Dean), Descriptive and Surgical Anatomy; WILLIAM H. TAYLOR, M. D., Obstetrics and Clinical Midwifery; THOMAS H. KEARNEY, M. D., Principles of Surgery and Surgical Diseases; J. C. MACKENZIE, M. D., Principles and Practice of Medicine; W. B. DAVIS, M. D., Materia Medica and Therapeutics; BYRON STANTON, M. D., Diseases of Women and Children, and Clinical Gynaecology; WILLIAM L. DUDLEY, M. D., Chemistry and Toxicology; N. P. DANDRIDGE, M. D., Genito-Urinary and Venereal Diseases; JOSEPH EICHBERG, M. D., Physiology.

LECTURERS AND DEMONSTRATORS.—ROBERT SATTLER, M. D., Diseases of the Eye and Ear; A. D. BENDER, M. D., Laryngoscopy and Diseases of the Throat; R. D. MUSSEY, M. D., Surgical Dressings; JOHN L. DAVIS, M. D., Pharmacy; W. A. DUN, M. D., Histology; F. W. LANGDON, M. D., Anatomy and Comparative Anatomy; GEORGE M. ALLEN, M. D., Chemistry; SAMUEL M. HART, M. D., Assistant Demonstrator of Anatomy; L. RADEMACHER, M. D., Pharmacist.

The twenty-third annual preliminary course began September 7th, the introductory lecture will be delivered October 2d, and the regular winter session will open October 3d and continue until March 1, 1884.

REQUIREMENTS FOR GRADUATION.—As usual, except that two courses at certain colleges of dentistry or pharmacy,

preceeding a course at this college, are accepted, and that courses in practical anatomy and practical chemistry are obligatory; also attendance at a clinical course at the City Hospital.

FEES.—Matriculation fee (annually), \$5; regular lecture term, \$75; graduation, \$25; demonstrator's ticket, \$5; practical chemistry, \$7; practical physiology and histology, \$7; single tickets, \$10; hospital ticket, \$5.

For further information address W. Clendenin, M. D., Dean, 136 West Seventh Street, Cincinnati.

MEDICAL DEPARTMENT OF THE UNIVERSITY OF WOOSTER,

CLEVELAND, OHIO.

FACULTY.—LEANDER FIRESTONE, M. D., LL. D. (Dean), Diseases of Women; AKIN C. MILLER, M. D., Obstetrics and Clinical Gynaecology; FRANK J. WEED, M. D. (Vice-Dean), Principles of Surgery and Didactic Surgery; XENOPHON C. SCOTT, M. D., Ophthalmology and Otology; J. E. BURNS, M. D., Diseases of Children; REUBEN A. VANCE, M. D., Operative and Clinical Surgery; GEORGE HUNERT, M. D., Principles and Practice of Medicine and Clinical Medicine; THEODORE A. WEED, M. D., L. R. C. P. Lond., Diseases of the Chest and Physical Diagnosis; JAMIN STRONG, M. D., Mental and Nervous Diseases; CHARLES C. ARMS, M. D., Anatomy; L. B. TUCKERMAN, M. D., Physiology; W. T. CORLETT, M. D., L. R. C. P. Lond., Lecturer on Dermatology; W. J. SHEPPARD, M. D., Therapeutics; J. H. STOLL, M. D., Materia Medica; WILLIAM B. SCRANTON, M. D., Lecturer on Chemistry and Toxicology; A. J. SCOTT, M. D. (Adjunct), Diseases of Women; W. C. CRAVEN, M. D., J. M. FRAZER, M. D., Demonstrators of Anatomy.

The regular winter session began September 5, 1883, and will continue five months. The summer session will commence February 13, 1884, and will continue five months. Candidates for matriculation are examined unless they have academical certificates. Women are admitted.

REQUIREMENTS FOR GRADUATION.—Two dissections under some competent demonstrator. The examination is in writing. Candidates in dental surgery, or persons who have attended two full courses in any accredited dental college where the four primary branches are taught, may become candidates after attending two courses of practical and clinical instruction in this college. Graduates in pharmacy will be accredited with one year on their pupilage.

FEES.—Matriculation, \$5; hospital ticket (one year), \$5; demonstrator's ticket, \$5; general ticket, summer session, \$40; general ticket, winter session, \$40; graduation, \$30.

For further information, address Leander Firestone, M. D., Dean, Wooster, Ohio.

Oregon.

MEDICAL DEPARTMENT OF WILLAMETTE UNIVERSITY,

PORTLAND, OREGON,

FACULTY.—WILLIAM H. WATKINS, M. D., Theory and Practice of Medicine; HOLT C. WILSON, M. D., Principles

and Practice of Surgery; E. P. FRASER, M. D. (Dean), Diseases of Women and Children; JAMES BROWNE, M. D., LL. D., Physiology and Physiological Anatomy; S. E. JOSEPH, M. D., Obstetrics and Psychological Medicine; C. H. WHEELER, M. D., Materia Medica and Therapeutics; J. C. WHITEAKER, M. D., General and Surgical Anatomy; R. G. REX, M. D., P. C., Chemistry; MATTHEW P. DEADY, LL. D., Medical Jurisprudence; F. B. EATON, M. D., Diseases of the Eye and Ear; H. CARPENTER, M. D., Hygiene; ALFRED KINNEY, M. D., Lecturer on Genito-Urinary Diseases; H. E. JONES, M. D., Lecturer on Clinical Surgery.

The eighteenth annual course of lectures will commence November 5, 1883, and will continue twenty weeks. "Unless already a matriculate of the university, or a graduate of some respectable college, academy, or high school, every candidate shall be examined as to his previous education, and to his fitness for entering upon and appreciating the technical study of medicine." Women are admitted.

REQUIREMENTS FOR GRADUATION.—One course in dissection, besides the usual requirements.

"All matriculates, in becoming such, are understood as pledging themselves to a lifelong fidelity to the code of ethics of the American Medical Association."

FEES.—Course of lectures, \$120; matriculation, \$5; demonstrator's ticket, \$10; graduation, \$30.

This school will comply with the requirements of the Illinois State Board of Health.

For further information address Professor E. P. Fraser, Dean, Portland, Oregon.

Pennsylvania.

UNIVERSITY OF PENNSYLVANIA,

DEPARTMENT OF MEDICINE,

PHILADELPHIA.

FACULTY.—JOSEPH LEIDY, M. D., LL. D., Anatomy; HENRY H. SMITH, M. D., Surgery (emeritus); RICHARD A. F. PENROSE, M. D., LL. D., Obstetrics and Diseases of Women and Children; ALFRED STILLÉ, M. D., LL. D., Theory and Practice of Medicine and Clinical Medicine; D. HAYES AGNEW, M. D., LL. D., Surgery and Clinical Surgery; WILLIAM PEPPER, M. D., LL. D. (Provost), Clinical Medicine; WILLIAM GOODELL, M. D., Clinical Gynaecology; JAMES TYSON, M. D. (Secretary), General Pathology and Morbid Anatomy; HORATIO C. WOOD, M. D., Materia Medica, Pharmacy, and General Therapeutics; THEODORE G. WORMLEY, M. D., LL. D., Chemistry and Toxicology; JOHN ASHHURST, JR., M. D., Clinical Surgery; HARRISON ALLEN, M. D., Physiology.

Demonstrators and Lecturers.—CHARLES T. HUNTER, M. D., Anatomy; ROLAND G. CURTIN, M. D., Physical Diagnosis; CHARLES K. MILLS, M. D., Mental Diseases and Electro-Therapeutics; J. HENRY C. SIMES, M. D., Pathological Histology; ADOLPH W. MILLER, M. D., Materia Medica and Pharmacy; JOSEPH G. RICHARDSON, M. D., Normal Histology; ROBERT MEADE SMITH, M. D., Experimental Physiology; JOHN MARSHALL, M. D., Nat. Sc. D., Practical Chemistry; BENJAMIN F. BAER, M. D., Clinical Gynaecology; ELLIOTT RICHARDSON, M. D.,

Clinical and Operative Obstetrics; EDWARD T. BRUEN, M. D., Clinical Medicine; J. WILLIAM WHITE, M. D., Surgery and Venereal Diseases; HARRY R. WHARTON, M. D., Clinical Surgery; JOHN B. DEEVER, M. D., Osteology and Syndes-mology; HENRY F. FORMAD, M. D., Morbid Anatomy, Pathological Histology, and Experimental Pathology; EDWARD T. REICHERT, M. D., Experimental Therapeutics; GEORGE A. PIERSOL, M. D., WILLIAM M. GRAY, M. D., Normal Histology; JOHN B. DEEVER, M. D., RICHARD H. HARTE, M. D., THOMAS R. NEILSON, M. D., EDMUND W. HOLMES, M. D., Anatomy; WILLIAM BARTON HOPKINS, M. D., HARRY R. WHARTON, M. D., RICHARD H. HARTE, M. D., Surgery; ALBERT L. A. TOBOLDT, M. D., Practical Pharmacy; WILLIAM A. EDWARDS, M. D., JUDSON DALAND, M. D., Clinical Medicine; FRANCIS X. DERCUM, M. D., ARCHER N. RANDOLPH, M. D., Physiology; WASHINGTON H. BAKER, M. D., Obstetrics.

A preliminary examination is required of all who are not matriculates of a recognized college or have not been examined by a county medical society in a manner referred to in the action of the Medical Society of the State in 1878.

The following-named graduates of the school conduct the admission examinations in the several cities in which they reside: Dr. C. H. M. Mastin, Mobile, Ala.; Dr. P. V. Schenck, St. Louis, Mo.; Dr. Joseph M. Towler, Columbia, Tenn.; Dr. Eugene A. Grissom, Raleigh, N. C.; Dr. C. D. Fishburn, Cincinnati, Ohio; Dr. E. C. Bullard, Boston, Mass.; Dr. ———, San Francisco, Cal.; Dr. C. Gilman Smith, Chicago, Ill.; Dr. C. H. Boardman, St. Paul, Minn.; Dr. H. C. Dimond, Detroit, Mich.; Dr. W. S. Elkin, Atlanta, Ga.; Dr. J. W. Whitbeck, Rochester, N. Y.

The preliminary course opened September 10th. The one hundred and ninth annual winter session begins October 1st, and lasts until the early part of April. The course of instruction is graded as follows: *First year*, anatomy, histology, materia medica and pharmacy, general chemistry, including chemical physics, physiology, general pathology, general clinics, medical and surgical; *second year*, anatomy, topographical anatomy, medical chemistry, physiology, general pathology and morbid anatomy, therapeutics, theory and practice of medicine, surgery, obstetrics, general clinics, medical and surgical, special clinics (nervous diseases, diseases of the skin, eye, ear, diseases of women and children); *third year*, general pathology and morbid anatomy, demonstrations in morbid anatomy, therapeutics, theory and practice of medicine, surgery, obstetrics, operative surgery, minor surgery, and bandaging, diseases of women and children, gynaecology, bedside instruction in practical medicine (including physical diagnosis), bedside instruction in practical surgery, clinical conference, general clinics, medical and surgical, special clinics (nervous diseases, diseases of skin, eye, ear, diseases of women and children); *fourth year (voluntary)*, clinical medicine and physical diagnosis, including laryngology, clinical surgery, operative surgery and venereal diseases, nervous and mental diseases, electro-therapeutics, gynaecology, dermatology, ophthalmology, otology, clinical and operative obstetrics. Final examinations are held in general chemistry, materia medica, and pharmacy at the end of the first year; in anatomy, medical chemistry, and

physiology at the end of the second year; in general pathology and morbid anatomy, therapeutics, theory and practice of medicine, surgery, obstetrics, and diseases of women and children at the end of the third year; and in clinical medicine, clinical and operative surgery, gynæcology, clinical and operative obstetrics, laryngology, dermatology, ophthalmology, and otology at the close of the four years' course.

REQUIREMENTS FOR GRADUATION.—These do not differ materially from those of the majority of schools.

FEES.—Matriculation, \$5; each annual course, \$150; dissecting material, \$1 a "part." There is no graduation fee. Six free scholarships are obtainable by competitive examination.

The school will comply with the requirements of the Illinois State Board of Health. It has its own hospital. Address Dr. James Tyson, Secretary, box 2838, Philadelphia.

JEFFERSON MEDICAL COLLEGE,

PHILADELPHIA.

DURING the year Professor Wallace has been made emeritus professor, and Dr. Theophilus Parlin has succeeded him as professor of obstetrics and diseases of women and children.

FACULTY.—SAMUEL D. GROSS, M. D., LL. D., D. C. L. Oxon., LL. D. Cantab., Institutes and Practice of Surgery (emeritus); ELLERSLIE WALLACE, M. D., Obstetrics and Diseases of Women and Children (emeritus); J. M. DA COSTA, M. D., Practice of Medicine; WILLIAM H. PANCOAST, M. D., General, Descriptive, and Surgical Anatomy; ROBERT E. ROGERS, M. D., LL. D., Medical Chemistry and Toxicology; ROBERTS BARTHLOW, M. D., LL. D. (Dean), Materia Medica and General Therapeutics; HENRY C. CHAPMAN, M. D., Institutes of Medicine and Medical Jurisprudence; SAMUEL W. GROSS, M. D., Principles of Surgery and Clinical Surgery; JOHN H. BRINTON, M. D., Practice of Surgery and Clinical Surgery; THEOPHILUS PARLIN, M. D., LL. D., Obstetrics and Diseases of Women and Children; WILLIAM THOMSON, M. D., Ophthalmology (honorary); J. SOLIS COHEN, M. D., Laryngology (honorary).

Demonstrators.—WILLIAM S. FORBES, M. D., Anatomy; J. EWING MEARS, M. D., Surgery; G. MASON WARD, M. D., Chemistry; MORRIS LONGSTRETH, M. D., Pathological Anatomy; COCHRAN MCCLELLAND, M. D., Obstetrics, etc.; D. E. HUGHES, M. D., Clinical Medicine; S. MASON MCCOLLIN, M. D., Pharmacy and Materia Medica; A. P. BRUBAKER, M. D., Physiology and Histology.

The preliminary session began September 10th. The fifty-ninth course of lectures begins October 1st, and ends the last of March. The spring session begins early in April, and closes on the last day of May. The college has a hospital of its own.

REQUIREMENTS FOR GRADUATION.—Candidates must take the dissection ticket for at least one session. No honorary degrees are granted. In other respects, the requirements are those usually enforced.

FEES.—Matriculation, \$5; full course of lectures, \$140; dissection, \$10; graduation, \$30.

For further information, address Professor Roberts Bartholow, Dean, at the college, Tenth Street, between Chestnut and Walnut Streets, Philadelphia.

WOMAN'S MEDICAL COLLEGE OF PENNSYLVANIA,

PHILADELPHIA.

FACULTY AND AUXILIARY INSTRUCTORS.—RACHEL L. BODLEY, M. D. (Dean), Chemistry and Toxicology; CLARA MARSHALL, M. D., Materia Medica and General Therapeutics; FRANCES EMILY WHITE, M. D., Physiology and Hygiene; ANNA E. BROOMALL, M. D., Obstetrics; JAMES B. WALKER, M. D., Principles and Practice of Medicine; HANNAH T. CROASDALE, M. D., Diseases of Women and Children; WILLIAM H. PARISH, M. D., Anatomy; WILLIAM W. KEEN, M. D., Principles and Practice of Surgery; J. GIBBONS HUNT, M. D., Histology and Microscopy; C. NEWLIN PEIRCE, D. D. S., Dental Physiology and Pathology; HORATIO C. WOOD, JR., M. D., Lecturer on Special Subjects; EDWARD T. BRUEN, M. D., Lecturer on Pathology; CHARLES K. MILLS, M. D., Lecturer on Nervous Diseases; LOUIS A. DUHRING, M. D., Lecturer on Dermatology; ALEXANDER W. MCCOY, M. D., Lecturer on Laryngoscopy and Rhinoscopy; EMILIE B. DU BOIS, M. D., Demonstrator of Anatomy and Instructor in Materia Medica; LUCIUS E. SAYRE, Ph. G., Demonstrator of Pharmacy; HENRY F. FORMAD, M. D., Demonstrator of Pathology; IDA E. RICHARDSON, M. D., Instructor in Practice of Medicine; ANNA M. FULLERTON, M. D., Instructor in Obstetrics; LENA V. INGRAHAM, M. D., Instructor in Surgery.

The thirty-fourth annual winter term will open October 4, 1883, and continue until March 13, 1884. The spring term will begin March 17, 1884, and continue ten weeks.

REQUIREMENTS FOR GRADUATION.—Besides the usual requirements, the candidate must have taken one course of lectures on histology and on pathology; two courses in practical anatomy, having made at least one creditable dissection of each of the usual divisions of the cadaver; one course in the chemical, the pharmaceutical, and the pathological laboratories and in the practical use of the microscope. Satisfactory evidence of having attended at least two courses of clinical lectures in the departments of General Medicine, Surgery, Obstetrics, and Gynæcology is also required from each candidate for graduation.

Clinical reports in some one department of medicine will be accepted in lieu of a thesis.

FEES.—Matriculation, \$5; professors' tickets, each, \$15, \$105; practical anatomy, \$10; graduation, \$30.

For the encouragement of capable and well-educated women whose means will not allow of the usual expenditure, a limited number of students will be admitted annually on the payment of thirty-five dollars for the session—exclusive of registration, matriculation, and graduation fee.

Address Rachel L. Bodley, M. D., Dean, North College Avenue and Twenty-first Street, Philadelphia.

MEDICO-CHIRURGICAL COLLEGE OF PHILADELPHIA.

THE dean informs us that this institution gives a three years' graded course; that the classes are "quizzed" at the beginning of each lecture on the one previously given in the same branch, no outside "quiz" being sanctioned; that an auxiliary literary course is given during the spring and the early part of the summer; and that the final examination is oral and in writing.

FACULTY.—GEORGE P. OLIVER, M. D. (President), Principles and Practice of Surgery and Clinical Surgery; GEORGE E. STUBBS, M. D., Anatomy and Clinical Surgery; CHARLES L. MITCHELL, Ph. D., M. D., Chemistry, Sanitary Science, and Medical Jurisprudence; WILLIAM F. WAUGH, M. D., Principles and Practice of Medicine and Clinical Medicine; ABRAHAM S. GERHARD, M. D., Physiology, Pathology, and Clinical Medicine; WILLIAM S. STEWART, M. D. (Dean), Obstetrics, Gynæcology, and Clinical Gynæcology; FRANK O. NAGLE, M. D., Materia Medica, Therapeutics, and Clinical Medicine.

ADJUNCT FACULTY.—G. BETTON MASSEY, M. D., Diseases of the Mind and Nervous System, and Electro-Therapeutics; ISAAC BARTON, M. D., Diseases of the Throat and Nasal Passages; JOHN K. FOULKROD, A. M., M. D., Demonstrator of Surgery; F. LE SIEURE WEIR, M. D., Dermatology; G. MAXWELL CHRISTINE, A. M., M. D., Materia Medica and Pharmacy; WILLIAM H. IRELAND, M. D., Obstetrics and Gynæcology; JAMES FARRAR STONE, A. M., M. D., Practice of Medicine and Physical Diagnosis; ARTHUR G. ALLAN, Ph. D., M. D., Otology; E. STANLEY PERKINS, M. D., Demonstrator of Anatomy; W. A. CHANDLER, A. M., M. D., Chemistry; CHARLES E. PIKE, D. D. S., Oral Surgery and Diseases of the Mouth; T. MITCHELL CHANCE, M. D., Minor Surgery.

The third winter session begins the first Monday in October, and continues six months. The preliminary term began September 3d.

REQUIREMENTS FOR GRADUATION.—Attendance on three regular winter sessions, the last one at this college, including laboratory courses, two terms of dissection, instruction in operative surgery and bandaging; evidence of literary proficiency. Courses attended at sectarian colleges are not recognized. The additional requirements are like those of most other colleges.

FEES.—Freshman year (pharmacy, dentistry, minor surgery and bandaging, histology, elementary anatomy, materia medica, and elements of chemistry), \$90; junior year (general anatomy, physiology, and general chemistry), \$105; senior year (regional anatomy, pathology, medical and physiological chemistry, sanitary science, therapeutics, practice of medicine, surgery, and obstetrics and gynæcology), \$105; matriculation, \$5; graduation, \$30; auxiliary literary term, \$35; dissecting "part," \$1.

This college has signified its intention of conforming to the requirements of the Illinois State Board of Health. For further information, address Charles L. Mitchell, M. D., Secretary, 112 North Thirty-fourth Street, Philadelphia.

South Carolina.

MEDICAL COLLEGE OF THE STATE OF SOUTH CAROLINA,

CHARLESTON.

FACULTY AND AUXILIARY INSTRUCTORS.—R. A. KINLOCH, M. D., Principles and Practice of Surgery and Clinical Surgery; J. P. CHAZAL, M. D., Pathology and Practice of Medicine, and of Clinical Medicine; MIDDLETON MICHEL, M. D., Physiology; F. L. PARKER, M. D., Anatomy, and Clinical Lecturer on Diseases of the Eye and Ear; J. FORD PRIOLEAU, M. D. (Dean), Obstetrics and Gynæcology; F. PEYRE PORCHER, M. D., Materia Medica and Therapeutics; T. GRANGE SIMONS, M. D. (Assistant), Pathology and Practice of Medicine and Clinical Medicine; A. R. GUERARD, A. R. S. M., Instructor in Chemistry; R. BARNWELL RHETT, M. D., Demonstrator of Anatomy; JOHN L. DAWSON, JR., M. D., Assistant Demonstrator and Prosecutor in Anatomy; GEORGE G. KINLOCH, M. D., Instructor in Microscopy and Prosecutor in Surgery; P. GOURDIN DESAUSSEURE, M. D., Assistant in Gynæcology.

The fifty-fifth annual course will begin October 15, 1883, and end early in March, 1884—embracing a period of twenty weeks.

REQUIREMENTS FOR GRADUATION.—These are as usual.

FEES.—Matriculation, \$5; course of lectures, including demonstrator's ticket and hospital advantages, \$75; graduation, \$30.

Address J. Ford Prioleau, M. D., Dean, 2 Glebe Street, Charleston, S. C.

Tennessee.

NASHVILLE MEDICAL COLLEGE

(MEDICAL DEPARTMENT OF THE UNIVERSITY OF TENNESSEE).

THE teaching corps is as follows:

W. K. BOWLING, M. D., LL. D., DEERING J. ROBERTS, M. D., Theory and Practice of Medicine and Clinical Medicine; WILLIAM P. JONES, M. D. (President), Insanity and Mental Hygiene (emeritus); DUNCAN EVE, M. D. (Dean), Surgery and Clinical Surgery; J. BUNYAN STEPHENS, M. D., Obstetrics and Clinical Midwifery; T. B. BUCHANAN, M. D., General, Descriptive, and Surgical Anatomy (emeritus); W. D. HAGGARD, M. D., J. S. CAIN, M. D., Gynæcology and Diseases of Children; W. F. GLENN, M. D., Physiology, Genito-Urinary, and Venereal Diseases; W. G. BIBB, M. D., Materia Medica and Therapeutics; PAUL F. EVE, M. D., General, Descriptive, and Surgical Anatomy; W. M. VERTREES, M. D., Medical Chemistry and Toxicology; WILLIAM G. BRIEN, M. D., LL. D., Medical Jurisprudence; J. G. SINCLAIR, M. D., Diseases of the Eye, Ear, and Throat; ROBERT RUSSELL, M. D., D. D. S., Dental Surgery; W. E. McCAMPBELL, M. D., Demonstrator of Anatomy.

The ninth annual course begins October 1, 1883, and ends February 26, 1884. An optional introductory course began September 3d.

REQUIREMENTS FOR GRADUATION.—Besides the usual requirements, dissection during the whole time of attendance.

FEES.—Matriculation, \$5; full course of lectures, \$75; demonstrator, \$10; graduation, \$25.

For further information address Duncan Eve, M.D., Dean, Nashville, Tenn.

Vermont.

MEDICAL DEPARTMENT OF THE UNIVERSITY OF VERMONT,

BURLINGTON.

FACULTY.—SAMUEL WHITE THAYER, M.D., LL.D. (Dean), General and Special Anatomy (emeritus); JOHN ORDRONAUX, M.D., LL.D., Medical Jurisprudence (emeritus); WILLIAM DARLING, M.D., F.R.C.S., Anatomy; ALBERT FREEMAN, A. KING, M.D., Obstetrics and Diseases of Women; HENRY DWIGHT HOLTON, M.D., Materia Medica and Therapeutics; JAMES LAWRENCE LITTLE, M.D., Principles and Practice of Surgery; ASHBEL PARMELEE GRINNELL, M.D., Theory and Practice of Medicine; RUDOLPH AUGUST WITTHAUS, M.D., Chemistry and Toxicology; J. HENRY JACKSON, M.D., Physiology and Microscopic Anatomy.

PROFESSORS OF SPECIAL SUBJECTS.—ROBERT WILLIAM TAYLOR, M.D., Diseases of the Skin; STEPHEN MARTINDALE ROBERTS, M.D., Diseases of Children; ADRIAN THEODORE WOODWARD, M.D., Surgical Diseases of Women; DANIEL BENNETT ST. JOHN ROOSA, M.D., LL.D., Diseases of the Eye and Ear; GEORGE MINOT GARLAND, M.D., Thoracic Diseases; WILLIAM JAMES MORTON, M.D., Diseases of the Mind and Nervous System; the Hon. EDWARD JOHN PHELPS, LL.D., Medical Jurisprudence; JOHN BROOKS WHEELER, Instructor in Principles and Practice of Surgery, and Assistant to the Chair of Surgery; JACOB CHASE RUTHERFORD, M.D., Demonstrator of Anatomy; J. B. EMERSON, M.D., Assistant in Diseases of the Eye and Ear.

The regular term opens the first Thursday in March of each year, and continues seventeen weeks.

REQUIREMENTS FOR GRADUATION.—Candidates must also pass a satisfactory examination before the Medical Faculty and Board of Medical Examiners appointed by the State Medical Society. No Thesis is required. "The only courses of lectures recognized are those taken at medical colleges recognized by the American Medical Association." "Certificates from preceptors who practice any peculiar system of medicine, or who advertise, or violate in any way the code of ethics adopted by the profession, will not be received, under any circumstances, even if the preceptors be regular graduates in medicine."

FEES.—Matriculation (each term), \$5; course of lectures, \$70; graduation, \$25. Students who have already attended two full courses of lectures in other regular schools are admitted on paying the matriculation fee and \$25. Theological students are admitted on general ticket by paying the matriculation fee.

For further information address Samuel W. Thayer, M.D., Dean, Burlington, Vt.

Virginia.

UNIVERSITY OF VIRGINIA, MEDICAL DEPARTMENT,;

ALBEMARLE CO., VA.

We have received no answer to our letter of inquiry, and the information given in the catalogue (last year's) is meager. The arrangement of the lectures seems to amount to a graded course.

FACULTY.—JAMES L. CABELL, M.D., LL.D., Physiology and Surgery; JOHN STAIGE DAVIS, M.D., Anatomy and Materia Medica; JAMES F. HARRISON, M.D., Medicine, Obstetrics, etc.; J. W. MALLET, M.D., Ph.D., F.R.S., Chemistry and Pharmacy; WILLIAM B. TOWLES, M.D., Demonstrator of Anatomy.

The sixtieth session begins October 1, 1883, and lasts nine months.

REQUIREMENTS FOR GRADUATION.—"Satisfactory attainments in all the subjects of instruction."

The fees are not stated definitely. There are two scholarships.

MEDICAL COLLEGE OF VIRGINIA,

RICHMOND.

The following changes have taken place in the Faculty: Dr. Henry H. Levy has been appointed to the chair of Physiology and Pathology, vice Dr. Manson, resigned; Dr. M. L. James has been appointed Dean in place of Dr. J. B. McCaw, resigned; Dr. Robert H. Cowan has been appointed Adjunct to the chair of Diseases of Women and Children; Dr. George B. Johnston has been appointed to the chair of Materia Medica and Therapeutics; Dr. J. N. Upshur has been appointed Adjunct to the chair of Practice; Dr. Francis M. Bennett has been appointed Adjunct to the chair of Physiology and Pathology; and Diseases of the Eye, Ear, and Throat have been made a separate department, with Dr. Charles M. Shields as Clinical Lecturer.

FACULTY.—JAMES B. MCCAW, M.D., Practice of Medicine; ROBERT T. COLEMAN, M.D., Obstetrics and Diseases of the Puerperal State; JOHN S. WELLFORD, M.D., Diseases of Women and Children; J. S. DORSEY CULLEN, M.D., Surgery; WM. H. TAYLOR, M.D., Chemistry and Pharmacy; CHRISTOPHER TOMPKINS, M.D., General and Special Anatomy; MARTIN L. JAMES, M.D. (Dean), Materia Medica and Therapeutics; HENRY H. LEVY, M.D., Physiology and Pathology.

ADJUNCT FACULTY.—JOHN R. WHEAT, M.D., Demonstrator of Anatomy; CHARLES M. SHIELDS, M.D., Diseases of the Eye, Ear, and Throat; W. AUGUSTUS LEE, M.D., Obstetrics and Diseases of the Puerperal State; A. SPIERS GEORGE, M.D., Surgery; CHARLES H. CHALKLEY, M.D., Chemistry; ARMISTEAD L. WELLFORD, M.D., Anatomy; ROBERT H. COWAN, M.D., Diseases of Women and Children; GEORGE BENJAMIN JOHNSTON, M.D., Materia Medica and Therapeutics; JOHN N. UPSHUR, M.D., Practice of Medicine; FRANCIS M. BENNETT, M.D., Physiology and Pathology.

The forty-sixth annual session will begin October 1, 1883, and continue until March 30, 1884.

Students are allowed to take a proficiency in the elementary branches, not as a diploma, but as a stimulus to study.

FEES.—Matriculation, \$5; professors' tickets, \$120; demonstrator, \$10; graduation, \$30; pharmacy course, \$30.

For further information address M. L. James, M. D., Dean, 312 East Grace Street, Richmond, Va.

THE STATUS OF

AMERICAN GRADUATES IN GREAT BRITAIN.

THE diploma of any recognized American medical college is accepted in Great Britain and Ireland as evidence of three years' medical study by all bodies which confer the degrees of Bachelor in Medicine (M. B.), Master in Surgery (C. M.), and Doctor in Medicine (M. D.). Graduates who are Masters in Arts of certain American academic colleges, among which are Columbia, Harvard, Yale, Princeton, and Amherst, are not required to pass examinations in arts and science before proceeding to the degrees of M. B., C. M., and M. D. in the United Kingdom.

Graduates of American colleges may become Licentiates of the Royal College of Physicians of London, Edinburgh, or Dublin, by passing a satisfactory examination, without previous residence in the United Kingdom.

They may become Licentiates of the Royal College of Surgeons of London, Edinburgh, or Dublin by becoming Licentiates of one of the Royal Colleges of Physicians above mentioned, and passing a satisfactory examination, without previous residence.

For the benefit of those who do not hold a degree in arts, one of our colleges, the Bellevue Hospital Medical College, makes a special matriculation examination. This special matriculation examination is optional with the student, and will be given to all who desire it before they have attended their first course of lectures. It is not given to graduates or to those who have already attended medical lectures in this or any other medical college. The subjects for the matriculation examination are as follows: English language, including grammar and composition. Arithmetic, including vulgar and decimal fractions. Algebra, including simple equations. Geometry, first two books of Euclid. Latin translation and grammar. In addition, one of the following optional studies is required: Greek, French, German, or natural philosophy, including mechanics, hydrostatics, and pneumatics. Text-books: Latin—Cæsar (*De Bello Gallico*), first two books; natural philosophy—Peck's *Ganot*, or Parker's *Philosophy*: Greek—first chapter of St. John's Gospel; French—first chapter of *Télémaque*, or Charles XII; German—Ader's *Reader*, 1st part.

For those who have passed this examination before attending their first course of lectures, the diplomas and the tickets of the college are recognized by the Royal College of Surgeons of England. The examination is not required of those who have already passed a matriculating examination at a medical college or a university recognized in England.

This special matriculation examination is necessary for those only who expect to present their tickets or diplomas

for recognition in Great Britain. Students who desire this examination must hand in their names to the secretary within the first two weeks of the regular term.

Correspondence.

LETTER FROM BUFFALO.

The Medical Department of the University of Niagara.—The Post-graduate College.—Professor E. M. Moore.—Professor Roswell Park.—The Buffalo Medical Association.—A Narrow-minded Medical Club.

BUFFALO, September 4, 1883.

IN the last two weeks the medical circles of Buffalo have been in a state of great excitement. As is well known, within the last few years two medical colleges have essayed to become diploma-mills of the first order, but "the sound of their grinding has become low." The first of these was known as the Mohawk College, and was homœopathic. This was fought by the Erie County Medical Society, and its charter annulled. From its ashes, Phoenix-like, arose the Hamburg Canal College, and a sad bird it was—with a charter similar to the United States Medical College—and a few months ago the law strangled it in its infancy. We thought there had been enough of colleges. But last week the catalogue of the Medical Department of the University of Niagara was issued, which, being in some respects a meritorious institution, deserves full mention. The time seemed ripe for the establishment of another medical school, for the following reasons: The Medical Department of the University of Buffalo has sustained three great losses within a few years, viz.: the death of Professor James P. White, the gynecologist; the resignation of Professor Julius F. Miner, the well-known surgeon, because of ill-health; and, thirdly, the resignation of Professor E. M. Moore, of Rochester, from the chair of General Surgery. This has left the college practically in the hands of younger men and new-comers to the city, with the exception of Professor Rochester, who has been one of its pillars almost since its commencement, thirty-eight years ago. Hence, some of the reputable physicians of the city have determined upon the formation of a new medical school, with Dr. John Cronyn at its head. Dr. Cronyn is one of the ablest physicians of the city, and it has been his aim for a decade or more to found a school for higher education in medicine. His education is superior, his social position unapproachable, his address and manner elegant, and his knowledge of scientific medicine of the highest order. It has always been a matter of surprise to physicians in Buffalo that he has not been offered a chair in the college here, but the reason is possibly in the fact that he is a Catholic. Through the influence of Dr. Cronyn authority was given the University of Niagara, a Catholic college at Suspension Bridge, to organize a Medical Department. But the university is situated in Niagara County, and hence the following amendment to "An act to incorporate the Seminary of Our Lady of Angels" (now the University of Niagara) was brought before the Senate and Assembly, and passed:

AN ACT to amend chapter one hundred and ninety of the laws of eighteen hundred and sixty-three, entitled "An act to incorporate the Seminary of Our Lady of Angels."

PASSED March 12, 1883.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

SECTION 1. Section six of chapter one hundred and ninety of the laws of eighteen hundred and sixty-three, entitled "An act to incorporate the Seminary of Our Lady of Angels," is hereby amended so as to read as follows:

SEC. 6. Whenever, in the opinion of the regents of the university, the state of literature in the said seminary, and the value of its property, according to the regulations of the said regents, shall justify the same, the said regents may, on the petition of the trustees, by an instrument under their common seal, erect the said seminary into a college with such name, and such number of trustees, and on such conditions, and with such powers and privileges conformable to law, as the said regents may deem proper, *and the said college shall have the right to maintain any department of learning that is maintained by any college or university in this State, and may locate and maintain any department thereof in the county of Erie.*

SEC. 2. This act shall take effect immediately.

This enabled them at once to fix the seat of the new school in Buffalo. The Niagara University is worth about \$250,000, has some twelve hundred students, and the officers are as follows: Bishop S. V. Ryan, President of Trustees and Chancellor; Rev. Patrick V. Kavanaugh, President of University; Rev. Michael J. Kircher, Vice-President. It will be seen at once that the trustees are all of the Roman Church. The faculty of the school is non-sectarian. With the exception of two, all the others are of Protestant denominations. The faculty and the different chairs, as well as the names of the occupants, may be seen in the following list:

JOHN CRONYN, M. D., *Professor of Principles and Practice of Medicine and Clinical Medicine (President of Faculty)*; THOMAS LOTHROP, M. D., *Professor of Obstetrics*; WILLIAM H. HEATH, M. D., *Professor of Descriptive and Surgical Anatomy*; AUGUSTUS R. DAVIDSON, M. D., *Professor of Medical Chemistry, Pharmacy, and Toxicology*; HENRY D. INGRAHAM, M. D., *Professor of Gynecology and Diseases of Children*; CHARLES G. STOCKTON, M. D., *Professor of Materia Medica and Therapeutics*; CHARLES C. F. GAY, M. D., *Professor of Operative and Clinical Surgery*; WILLIAM S. TREMAINE, M. D., *Professor of Principles and Practice of Surgery and Clinical Surgery*; CLAYTON M. DANIELS, M. D., *Professor of Clinical Surgery and Adjunct Professor of Surgery*; GEORGE E. FELL, M. D., *Professor of Physiology and Microscopy*; ALVIN A. HUBBELL, M. D., *Professor of Ophthalmology, Otology, and Laryngology (Secretary of the Faculty)*; HON. JOSEPH M. CONGDON, *Professor of Jurisprudence*; JOHN L. C. CRONYN, M. D., *Demonstrator of Anatomy*.

There are some very good men among these, and a few who are very poor indeed. Certainly Buffalo does not contain any one better fitted for a teacher and professor than Dr. Cronyn, Sr. Dr. Lothrop, one of the editors of the "Buffalo Medical and Surgical Journal," will undoubtedly make a first-class instructor in his department. Dr. Heath, United States Marine Surgeon, will do well as an anatomist. Dr. Davidson, also of the "Journal" staff, has spent many years in fitting himself for such a position as he holds. Dr. Ingraham may make a good teacher, but has no particular fitness for his position, and it is the opinion of most that some one better might have been chosen. There is not a man in the faculty better adapted to teach than Dr. Stockton, a young man destined to be one of Buffalo's ablest and most honorable physicians. Dr. Gay has made himself a reputation as a surgeon, and his connection with the Buffalo General Hospital will bring in considerable material for clinics. Dr. Tremaine, of the United States Army, has had a vast surgical experience, and is an interesting and good lecturer. Dr. Daniels is a beginner, as yet unknown, but destined, I think, to be one day, through his perseverance, one of the good surgeons of the city. The professor of physiology should have been a physician, having more knowledge and experience in that department than Dr. Fell, whose opportunities have been very limited indeed. Dr. Hubbell disgraced himself once by being a member of the faculty of the disreputable and

defunct Mohawk Mill. Hon. Joseph M. Congdon is an ex-Assemblyman and a good lawyer. Dr. Cronyn, Jr., will do well as demonstrator.

It will be seen from the foregoing that the faculty might easily have been improved, for it might have secured Dr. Polhman as physiologist, Dr. Lucien Howe as ophthalmologist, and Professor Kellicott as histologist. But, even with the faculty as it is, they can all do thorough and good work in a noble cause if they carry out their intentions, which are honest and honorable. That these are such can be seen by the following excerpts from their catalogue:

The course of study shall be three years, and will comprise three full courses of lectures of six months each; but the faculty would earnestly recommend that students extend their studies to four years, that the practical branches may be more fully taught and understood.

The course will be arranged in grades or classes, in such a manner as to advance the student progressively and systematically from one subject to another in a just and natural order. . . .

All students, on entering the Medical Department of this University, must pass a matriculation examination in such studies as are considered necessary to fit them for the study of medicine, except students who shall produce testamentary evidence of preliminary qualification from a school or college recognized by this University, and graduates in medicine and students taking partial courses.

Students who may have attended lectures at some recognized medical school, and students of the Medical Department of this University, may be admitted to advanced standing by passing the required examinations in the studies of the preceding grades. . . .

The Degree of Doctor of Medicine will be conferred by this University upon every candidate who has completed the prescribed course of study and passed the required examinations, and who is twenty-one years of age and of good moral character.

I quote these few lines from the announcement:

Inasmuch as there seems to be a very general desire that the standard of medical education should be made higher, and it being within the province of the University to inaugurate such a step at the outset, it hopes to obtain that patronage and support which such an advance in medical education entitles it to.

Naturally the question arises, How long will they carry out these good intentions? Will there not be a dearth of medical students with such requirements? Clinical material they do not lack, nor other means of teaching. They have the Sisters of Charity Hospital, an eye infirmary, a lying-in asylum, and the Medical and Surgical Dispensary. At least as long as Dr. Cronyn lives, the institution will hold to its chosen standard. After that it will be a question whether a Protestant faculty will be ruled by Catholic trustees.

Dr. Hopkins has expressed some doubt as to the legality of their charter, and has had some correspondence, as secretary of the Board of Censors of the Erie County Medical Society, with the Board of Regents of the New York State University. The regents, having granted the charter, naturally consider it legal, and the State laws appear to coincide with their opinion. The matter has even been taken up by the secular press, and doctors have freely vented their opinions as to the new college. Some have been in favor and some not.

There is still more cause for excitement, however, for still another new college needs mention. It is called the Post-graduate College, and the faculty is as follows:

F. Hamilton Potter, M. D., Professor of Physiology and Dean.

E. E. Stark, M. D., Professor of Obstetrics.

Willis G. Gregory, M. D., Professor of Materia Medica.

J. H. Pryor, M. D., Professor of the Principles and Practice of Medicine and Clinical Medicine.

J. W. Putnam, M. D., Professor of the Principles and Practice of Surgery.

J. Frank, M. D., Professor of Clinical Surgery.
 Eli H. Long, M. D., Professor of Gynecology.
 Edward Clark, M. D., Professor of Anatomy.
 Charles Weil, M. D., Professor of Medical Jurisprudence.
 P. B. Hoyer, M. D., Professor of Chemistry.
 James A. M. Paulding, M. D., Professor of Pathology.
 DeW. C. Greene, M. D., Professor of Ophthalmology.
 S. Howard Moore, A. M., M. D., Professor of Herniology.

The particular point of interest in this is that most of the professors are just far enough out of their teens to get diplomas. The object of the Post-graduate Medical School, as stated in one of the papers, is "to polish off the graduates of the other Buffalo medical schools."

The August number of the "Buffalo Medical and Surgical Journal" speaks thus of the recent loss of a distinguished professor at the Buffalo Medical College:

Another severe blow, quite unexpected and involving a loss which it will be impossible to supply, is the resignation of Professor E. M. Moore, who for many years has been a tower of strength to the college, attracting from far and near, by his eminent ability and wide reputation as a surgeon and teacher, students who have loved him for his sterling worth and unsullied private and professional character.

Professor Moore's resignation is a loss to the profession of this city as well as to the college. It is but fair to say of him that he is recognized as the ablest lecturer on surgery in this country. In the clearness of his lectures and the logical and practical arrangement of the subject-matter he presents, and his large and varied experience, Professor Moore has but few equals and no superior.

The same journal speaks quite ill-naturedly of his successor, as follows:

We learn that Dr. Roswell Park, of Chicago, has been appointed lecturer on surgery and clinical surgery in the place thus vacated. We fail to ascertain, after repeated inquiries in surgical circles, that the new appointee brings to this responsible position any very extensive experience or reputation. Dr. Park enters upon his new duties a comparative stranger, whom we do not know, and who, if he possesses the ability to fill the chair once occupied by men of such surgical eminence as Hamilton and Moore, should possess a high order of professional attainments, an extensive experience in his profession, and such skill as an operator as to make himself known and become a valuable acquisition to the profession of this city. The position is a difficult one to occupy, and will test the metal of the new incumbent.

The fact is that Professor Park is one of the rising young men of the United States. He is one of the six under-editors of the invaluable "Annals of Anatomy and Surgery," is the editor of the "Chicago Medical Weekly," and a lecturer at Rush Medical College; and Buffalo is to be congratulated upon securing so good a successor to Professor Moore. The cause of this attack is undoubtedly that the editors think the Buffalo college should long ago have had adjunct lecturers and professors in training for the higher positions. Thus the professors might now all be of home manufacture. There is undoubtedly just reason for a little displeasure at this, and no one doubts that it is a proper criticism to make. If the care had been taken to select some of the best and most ambitious of the young men to assist in the instruction, they might now have been among the most distinguished of our profession.

It was very unfortunate that Professor Park should meet with such a reception, yet it will not be long before the inimical physicians have recognized him for the ability he is known, from his reputation in Chicago and elsewhere, to possess.

There is not much going on in the medical societies. Dr. Hoyd read a paper this evening before the Buffalo Medical Association upon club-foot, giving a new theory as to its origin in the epiblast cells of the embryo. It aroused considerable discussion.

One of the medical clubs of the city, I hear, has passed a resolution that its members shall only call each other in consultation. It might well be named the Medical Trades-Union.

Miscellany.

A NEW THEORY OF ALBUMINURIA.—At a recent meeting of the Paris Academy of Medicine, M. Semmola, of Naples ("Progrès médical," June 9, 1883), brought forward a new theory with regard to the causation of Bright's disease. This malady he regards as not essentially renal, but as consisting in a general morbid alteration of nutrition, and observes that albumin in such cases is not passed by the urine only, but by all the secretory organs. This alteration deprives the albuminoid materials of the blood of their power of being assimilated, and so causes their excretion by the emunctories. The renal lesions he ascribes to mechanical irritation of the tubules of the kidney by the constant passage of albumin through them. Albuminuria is therefore a cause, not a result, of renal disease. M. Semmola founds these views on a series of experiments on animals. He injected into the blood-vessels various substances containing albumin, as white of egg, milk, and blood-serum, with the result of inducing artificial Bright's disease. White of egg was most active in this way. He has therefore concluded that the more nearly albuminoids approach the characters of serum-albumin, the less likely they are to injure the kidneys by irritation, and *vice versa*.—*Practitioner*.

TREATMENT OF SCROFULIDES IN CHILDREN.—The "Journal of Cutaneous and Venereal Diseases" thus summarizes some conclusions recently published by M. Sabatier: I. The best mode of treating scrofulides of children is by scraping followed by the thermo-cautery. Scraping removes the diseased tissue, and cauterization completes the work by destroying the pathological elements which have survived the former process, and by setting up a benign and reparative inflammation. II. After every operation for scrofulide of the limbs, an air-tight dressing (*pansement par occlusion*) with strips of diachylon plaster will be found of great advantage by repressing the tendency to exuberant graulations. The sore heals more rapidly, and the resulting cicatrix is thinner and more flexible than when the usual bandages are employed. III. This kind of dressing, however, is almost impossible of application on the face and neck. IV. Local treatment of a scrofulide should always be resorted to in aid of constitutional measures. Only the former will avail to arrest a suppurating process which has lasted for several years. Without local treatment, too, the patient is liable to be more or less disfigured by the cicatricial keloids which will inevitably be produced. It is in cases of tuberculous scrofulide, against which the best-directed constitutional treatment is generally powerless, that local measures are of the greatest utility. By destroying the tubercles at the outset of their development, we effectually check the progress of the evil.

ARMY INTELLIGENCE.—*Official List of Changes of Officers serving in the Medical Department of the United States Army from September 1, 1883, to September 8, 1883.*—SHUFELDT, ROBERT W., Captain and Assistant Surgeon. Granted leave of absence for three months on surgeon's certificate of disability, with permission to leave the Department of the South. Par. 3, S. O. 204, A. G. O., September 5, 1883. — WAKEMAN, W. J., First Lieutenant and Assistant Surgeon. Assigned to temporary duty at Fort Sidney, Nebraska. Par. 2, S. O. 92, Department of the Platte, August 28, 1883.

NAVAL INTELLIGENCE.—*Official List of Changes in the Medical Corps of the Navy during the week ending September 8, 1883.*—Passed Assistant Surgeon Oliver Diehl, detached from the Naval Academy and ordered to the United States steamer Quinnebaug, European Station, per steamer of the 15th inst. — Passed Assistant Surgeon Frank Anderson, detached from the United States steamer Quinnebaug, on reporting of relief, and granted leave of absence for three months.

Original Communications.

THE CEREBRAL CORTEX.*

By AMBROSE L. RANNEY, M. D.

If a section of the cerebral cortex, in a plane vertical to that of the surface, be pressed between two thin plates of glass and then inspected by transmitted light, it will appear to the naked eye to resolve itself into secondary zones, or strata of unequal transparency. It is this peculiar appearance that has led some anatomists to describe the cortex as consisting of regularly stratified layers of alternating gray and white matter—a statement which is not supported by microscopical research. It must now be conceded that the intimate structure of the cortical substance is not the same in all parts of the brain; and that many valuable suggestions are afforded by the variations in this respect which special parts present from the type most commonly met with in the convolutions. These will be considered later.

The convolutions of the brain apparently obey some fixed law as regards their development, distribution, and the microscopical characteristics of their cortical layer. If the most prominent points of the convolutions in any given horizontal or vertical section of the adult brain be united by a curved line, it will be found that the curve described is continuous if the brain be in all respects a typical one. In old age, effects of senescence become manifest in the brain, as in the other organs. One of these is a retraction or sinking of certain convolutions, so that a continuous curve no longer unites the tips of all the convolutions over which it is described. In addition, the gray matter of the cortex becomes diminished in thickness in old age; and its color is changed to a yellowish white, on account of a transition of the cell elements into a granulo-fatty state. In certain mental diseases also, which tend to create a premature dotage, such as alcoholic poisoning, paralytic dementia, melancholic delirium, etc., we are apt to discover an atrophy of the cortical layer.

The *convolutions* of the brain present all varieties of configuration, not only in animals of different species, but even in the same individual. Even in homologous regions of the brain the convolutions are seldom, if ever, the same in point of outline. This can be demonstrated by laying a piece of transparent paper over a vertical section of the brain and tracing upon it the outline of the convolutions of one side as far as the median line; now double the paper over so as to cover corresponding regions of the opposite

side, and no two convolutions will be found to present an absolutely identical contour. Luys states that, in his extended researches, he has never encountered a brain which was perfectly symmetrical when tested in this way. This statement has a medico-legal value—*asymmetry* having been thought by some neurologists to be conclusive evidence of existing disease or congenital defect.

The *color of the cortex* differs with age and the race. In the dark-skinned races, especially marked in the negro, it is darker than in the white man; in the babe, it is uniformly grayish and of a gelatinous consistence; in early childhood, it assumes a somewhat rosy tint; in the adult, its vascularity is apparent; in old age, it assumes a yellowish white color and loses its vascularity. The gray color of some zones as compared with others is stated by Meynert to be due to the presence of pigment within the cell elements with which the cortex is so abundantly supplied.*

The *thickness* of the cortical substance varies in different regions of the brain, being thicker in the anterior parts, as a rule, than in the posterior. Its average thickness may be stated to vary from two to three millimetres. Gratiolet has called attention to the curious fact that the thickness of the

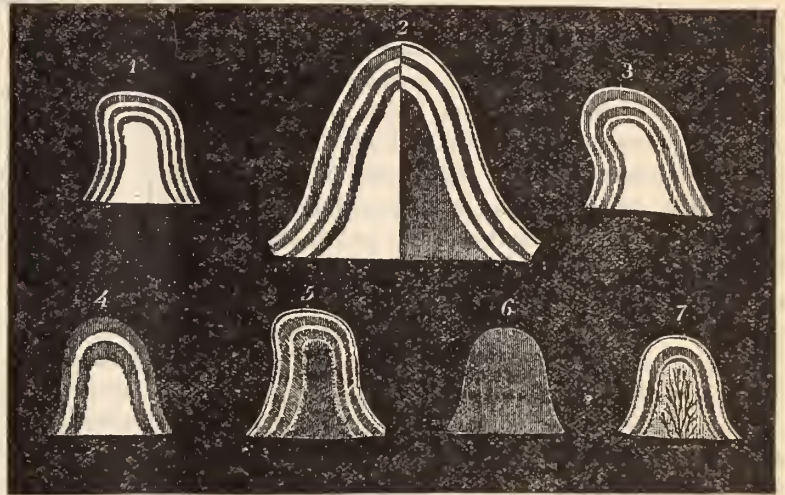


FIG. 1.—STRUCTURE OF THE CONVOLUTIONS. (After Baillarger.)

1, the six alternate gray and white layers in the cortical substance of the convolutions; 2, enlarged section of a convolution—the left half is seen by reflected light—layers arranged as in the preceding figure—in the right half, seen by transmitted light, the medullary layers are rendered dark by their opacity—the layers of gray substance, on the other hand, which are translucent, are represented in white; 3, section of a convolution showing the unequal thickness of the white layers—at first sight only three layers can be distinguished, two gray and an intervening white layer—more attentive examination shows six layers, the superficial and deep white layers being, however, very narrow; 4, section of a convolution showing the three layers of gray matter observed by Vleq d'Azyr in the occipital lobe; 5, tendency to radiation shown by the white fibers in the gray matter of the convolutions; 6, section of a cerebral convolution in a newly born infant, seen by reflected light—it presents a homogeneous appearance; 7, same section seen by transmitted light—presents the same stratification and tendency to radiation which are observed in the adult.

cerebral cortex is much less in races of small stature than in those of greater average height.

If we make thin sections of the cortex and color them with different reagents (each of which, by its chemical affini-

* This article formed a portion of my course of lectures at the Medical Department of the University of the City of New York during last winter's session. Two previous articles, lately published in this journal, may be useful in explaining some of the terms employed here.

* We know that the medullary substance of the "island of Reil" and of the "external capsule" is here and there studded thickly with nerve-cells, which, however, fail to give it a gray appearance on account of the absence of pigment.

ty, tends to bring out some special feature in its anatomical construction), and then subject them to the magnifying power of strong objectives, we are enabled to form a clearer conception of the actual construction of the zones of unequal transparency seen by the naked eye (first brought to professional notice by Baillarger). (See Fig. 1, page 313.) By the judicious employment of gradually increasing powers in the microscopic objectives used, the general arrangement of the elements may be first mastered, and, later on, the minute details of each of the component parts may be studied.

In such research we are struck, at first, by the immense numbers of *pyramidal-shaped cells** which are encountered within the cortical substance, each of which seems to point toward the surface of the brain; as if attracted toward it, like needles "so magnetized as to always point to the pole" (Luys). These are the nerve-cells; which are furthermore disposed in *regular strata*, parallel with the surface of the convolutions, and placed successively upon each other. It will be noticed, in the third place, that the *cells grow larger* as you pass from the external strata inward; † and that those of each individual layer have some distinctive peculiarities which appear to shed some light upon their function. When we come to study the characteristics of the different layers, these points will be discussed. Our attention is drawn, in the fourth place, to the fact that *these cells give off branching processes* which anastomose with each other, thus constituting what may be considered a continuous structure over the whole area of the convolutions. By means of these small, thread-like processes, the cells are probably enabled to communicate vibratory molecular movements from one to the other, while some are the unquestioned means also of communication between the nerve-cells and the nerve-fibers which we have previously discussed. In the fifth place, we encounter an *intercellular substance*, which serves to cement the cells and to maintain a fixed position for them, as well as to furnish passage for the vessels of nutrition of the cells. This is the "neuroglia," a connective-tissue formation.

We are now enabled to appreciate the analogy which Malpighi drew between the arrangement of the cells of the cortex and the seeds of the pomegranate, embedded in the white fibrous tissue which incloses them on all sides.

The *nerve-fibers* probably join the nerve-cells in the region of their bases; the processes given off from the apices of the cells appear to serve as a means of communication between the cells of the different layers of the cortex.

The *nerve-cells*, when examined as individual structures, are found to present a bright nucleus ‡ and a nucleolus, and to be destitute of an investing membrane (Luys). In fresh brains, they are of an amber color. When very high powers are used, the protoplasm of the nerve-cells becomes resolved

into distinct fibrillæ, which interlace with each other and become agglomerated in the region of the nucleus. The

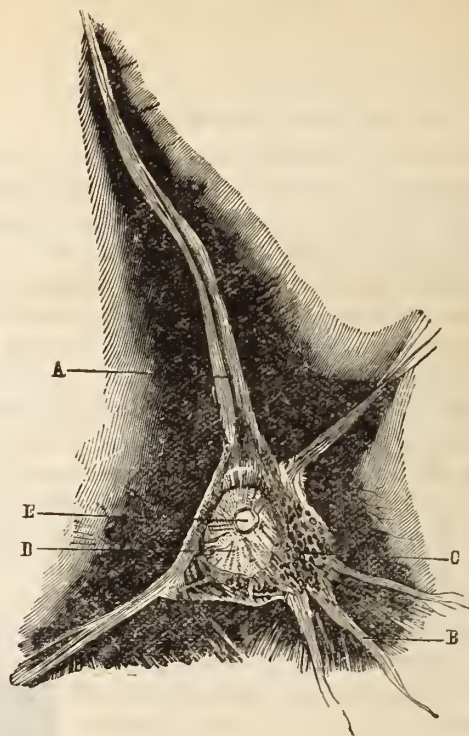


FIG. 2.—CORTICAL CELL OF THE DEEPER ZONES AT ABOUT 800 DIAMETERS (Luys.) A section of the cell is made through its greater axis, its interior texture being thus laid bare. A represents the superior prolongation radiating from the mass of the nucleus itself; B, lateral and posterior prolongations; C, spongy areolar substance, into which the structure of the cell itself is resolved; D, the nucleus itself seems only to be a thickening of this areolar stroma—it sometimes has a radiated arrangement; E, the bright nucleolus is itself decomposable into secondary filaments.

arrangement of these delicate fibrillæ has been compared by one of the most recent investigators (Luys) to the "wicker-work of an osier basket," and the same observer claims that the nucleus and nucleolus have been resolved by him into distinct secondary filaments which present a radiated appearance. I quote from him as follows: "Imagination is confounded when we penetrate into this world of the infinitely little, where we find the same infinite divisions of matter that so vividly impress us in the study of the sidereal world; and when we thus behold the mysterious details of the organization of an anatomical element, which only reveal themselves when magnified from seven to eight hundred diameters, and think that this same anatomical element repeats itself a thousand-fold throughout the whole thickness of the cerebral cortex, we can not help being seized with admiration; especially when we think that each of these little organs has its anatomy, its individuality, its minute organic sensibility; that it is united with its fellows; that it participates in the common life; and that, above all, it is a silent and indefatigable worker, discreetly elaborating those nervous forces of the psychic activity which are incessantly expended in all directions and in the most varied manners, according to the different calls which are made upon it and set it vibrating."

The *neuroglia*, to which we have referred in a general way as serving as a cement to fix the nerve-cells, allows

* Meynert pronounces the nerve-cells of the outer cortical layer to be distinctly *star-shaped*.

† They vary from 10 μ to 40 μ in height.

‡ In young subjects and in normal adult brains, the nuclei are seldom round or oval. They are usually *pyramidal* or *spindle-shaped*, running out into sharp ends. Their angles are often seen to project into the cell-processes. Arnold states that the pressure of the protoplasm of the cell tends to make the outline of the nucleus correspond to that of the cell.

also of the transmission of blood-vessels into the substance of the cortex. The branches given off from the vessels of the pia mater enter the cortex upon its free surface, and immediately divide into a network of small capillary twigs, which invest the adjacent nerve-cells in an areola extremely rich in blood-vessels. In addition to these two functions, the most superficial layer of the cortex is composed largely of this connective-tissue formation, as will be seen by studying the diagrammatic drawing which I now show you.

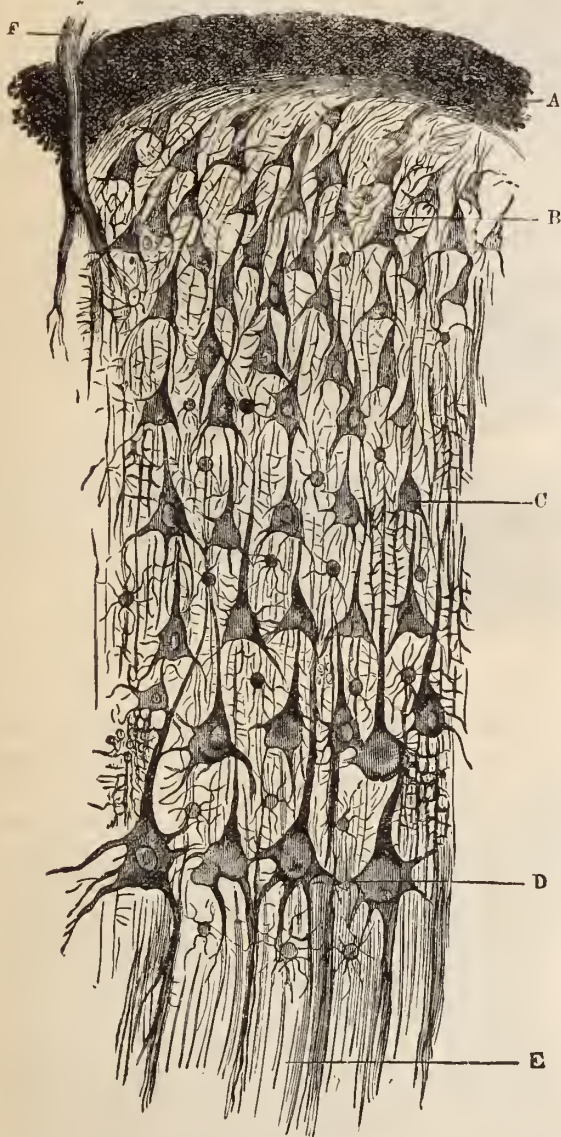


FIG. 3.—HALF-DIAGRAMMATIC FIGURE OF THE CEREBRAL CORTEX, magnified about 280 diameters, giving a view of the entire arrangement of the different zones of cells, and their relations to one another, and to the surrounding neuroglia. (Llys.) The region A corresponds to the sub-meningeal network of the neuroglia. The region B to the sub-meningeal zones of small cells (region of the *sensorium commune*); the region C is intermediate between the sub-meningeal and the deeper zones of cells which are indicated at D. At E we note the dipping of the fasciculi of white substance into the plexus of cortical cells. F represents a capillary at the moment when it plunges into the tissues of the cortex.

This stratum of the cortex has been compared by Llys to the epithelial covering of the mucous and cutaneous surfaces of the body, since he believes that it is designed to protect the nerve-cells from direct contact with the capillaries of the pia mater.

While serving thus as a source of protection and isolation, it probably also filters, as it were, the juices which escape from the meningeal vessels for the nourishment of the nervous elements. This view seems to be supported by a peculiarity in the arrangement of the smaller vessels, which can be traced into the substance of the cortex. They are found to be surrounded for almost their entire circumference by an adventitious sheath, which "invests them like a muff," and prevents the nerve-cells from coming into direct contact with any portion of the vascular system. We are forced, therefore, to believe that the nerve-cells derive their *nutritive elements* only through the mediation of other structures. The external layer of the cortex will subsequently be considered in greater detail.

(To be continued.)

A CASE OF MASCULINE FALSE HERMAPHRODITISM IN A CALF.

BY FRANK S. BILLINGS, VET. SURG.,
BOSTON.

THE subject of this observation was a calf, a year old, light red in color, belonging to Dr. Stephen C. Martin, the cultivator of animal vaccine, who very kindly placed it at my disposal for examination.

EXTERNAL APPEARANCES.—The head was more male than female in appearance. The horns were three inches long, and haired to within one inch of the tips. The animal betrayed the sexual irritability and action of the male, and was beginning to be ugly in disposition. The vulva was wanting, and there was no intimation of any introitus vaginae. The skin in the immediate locality of what should be the region of the external sexual organs of a female was very smooth and hairless; from it extended a peculiar body, resembling a flexed little finger as much as anything, which was an enlarged clitoris. It was impossible to recognize anything of a preputial character; it came out of the skin, and was covered by a smooth skin or membrane; therefore it did not extend out of a præputium, but, if extended, simply curled on itself upward toward the anus, just as one flexes the smaller digit when closing the hand. The orificium urethrae was very small, not easily to be seen, immediately above the clitoris; it admitted a No. 6 catheter (English), which passed in 13 cm. before the urine flowed. The animal passed urine in a very singular manner, i. e., not in a steady stream, but spasmodically so far as the distance which it went from the body was concerned; sometimes it flowed out, then with a spasm it would go in a small stream six or eight feet behind the animal, varying in this way until the operation was completed. When one examined the parts around the clitoris, a peculiar convoluted mass was to be felt, situated subcutaneously and immediately anterior to the clitoris.

No other indications of a penis could be seen or felt on external examination. No scrotum was present. The raphé was indistinctly indicated. Four elongated, roundish bodies were to be both seen and felt in the position of the

testicles, but they did not depress the skin—i. e., were not pendent—when the animal was standing. They are made apparent in the illustration (Fig. 1) by drawing the skin tightly forward over the abdomen. Two sets of teats were

amination, sufficiently demonstrated their testicular character, with a great predominance of connective tissue. The epididymis was wanting, as was previously mentioned.

As can be seen in the illustration (Fig. 2), the anterior

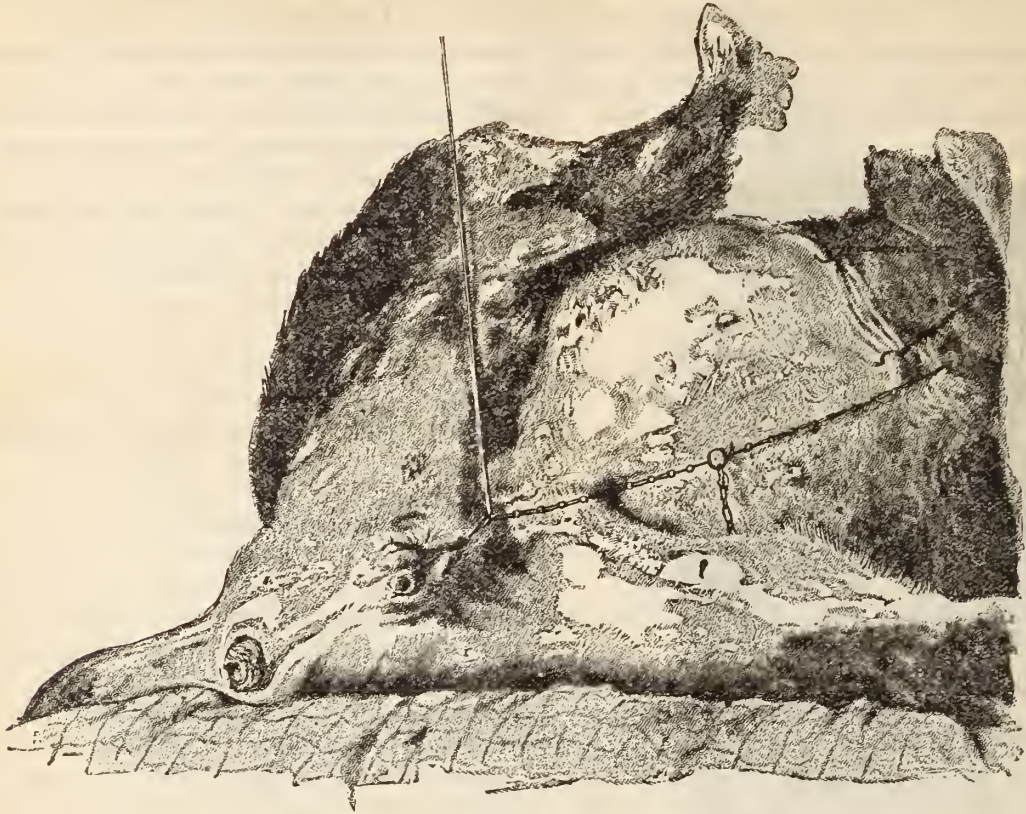


FIG. 1.

visible. No indications of an udder were discernible either micro- or macroscopically. The posterior teats resembled those generally seen in bulls; they were 1 ctm. long, and solid; the anterior pair were more widely separated—2.5 ctm. long, and had a canal, out of which could be pressed a slight amount of pearly-colored fluid.

INTERNAL EXAMINATION.—Very careful removal of the skin revealed the entire absence of any scrotal tunic to the testicles. The external appearance of two sets was confirmed. The anterior or true testicles were 5 ctm. long and 3 ctm. thick; the supplementary testicles were 4 ctm. long and 2.5 ctm. thick, and had a ligamentous connection with the anterior ones, in which ran blood-vessels and nerves, but nothing having the appearance of ducts. The epididymis was well developed in the anterior pair, but was wanting in the posterior. In the supplementary testicles two ducts, 10 ctm. long, were to be seen, one from each, extending to the penis, or what answered to it, and becoming lost in the convoluted mass previously mentioned. A very thin serous membrane covered these supplementary organs. On cutting them open, they presented a smooth surface, less spongy than the regular tissue of the testicles. The parenchyma had a peculiar ashen-gray color, with white striæ running from the center of the body toward the periphery, and a markedly developed corpus Highmori. It was at first thought that these organs might be ovaries, but an inspection of the cut surface, with subsequent microscopical ex-

pair of testicles had all the normal attributes, save the embracing tunics; they hung free in a mass of loose connective tissue, from which the cords were easily loosened to the inguinal ring, toward which they may be seen extending. The cremasters were exceedingly well developed. Here comes the question about the gubernaculum Hunteri and the hypothetical part it plays in the descent of the testicle. Of course, the usual remnant adherent to the walls of the scrotum was wanting, and no rudiment of any such organ was to be seen.*

The epididymis was well developed, and the seminal ducts could be easily traced along the spermatic cord until they entered the ring. Cross-section of these organs presented to view a parenchyma having the peculiar dark

* Let me here remark that the teleological theorist would often seem to have some grounds for his belief, for we frequently find that natural laws place at our disposal a certain species of animal by which hypothetical questions can alone be decided. It is so with the question of the function of this so-called gubernaculum Hunteri. In almost all the domesticated mammalia, as well as in man, the testicles descend before birth, hence in an embryonal state. In the horse they do not descend until some months after birth, and therefore this animal offers the opportunity to settle the question. I have in vain tried to get male colts prematurely born, or that had died within a few weeks after birth, in order to make such studies; perhaps some inquiring reader may be more fortunately situated. I suggest it as an object for original research, and a subject for a valuable paper. Pigs, cats, or dogs will not answer the purpose, nor yet calves, unless got very young, as embryos, and then not as well as colts.

orange-yellow customarily seen in these organs in the bull. It was spongy, and swelled up beyond the level of the thin

led to the determination that it was a rudimentary uterus. The horns of this organ were three inches long; the body,

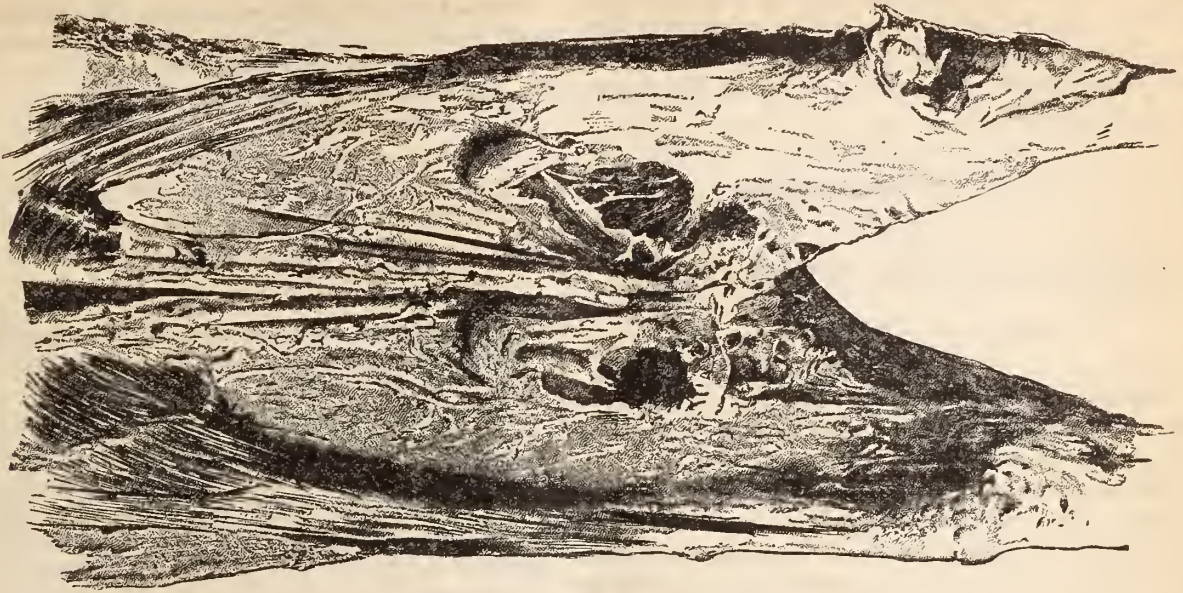


FIG. 2.

albuginea. Microscopical examination gave evidence of its true nature; but the cells were very immature, small, round, and epithelial. No traces of spermatozoa were to be discovered. The length of the funiculus was 24 ctm.

or neck, two inches. The horns had a very distinct lumen, which united in the cavity of the body as a cul-de-sac. This uterus-like body was immediately above the bladder, and terminated bluntly, as a sort of tuberosity, above the penis, being intimately connected with it, but having no internal communication with its interior.

The Penis.—The urethra did not run through the penis for its entire length (i. e., its intra-pelvic portion, which was all there was present), but consisted of a thin-walled canal, running along its superior surface and entering it at the pars cavernosa. From the latter, with its peculiarly powerful accelerator urinæ (in the bull), to the termination of this organ in the clitoris, were to be seen two convoluted masses. The normal penis of the bull possesses a peculiar sigmoid curvature, situated immediately posterior to the scrotum, provided with retractor muscles, which are attached to the ischium (see Fig. 3). This sigmoid curvature was here favored with a dual representation. The one immediately adjoining the clitoris was somewhat normal in its course, i. e., its folds were parallel to the course of the penis; the retractors were, of

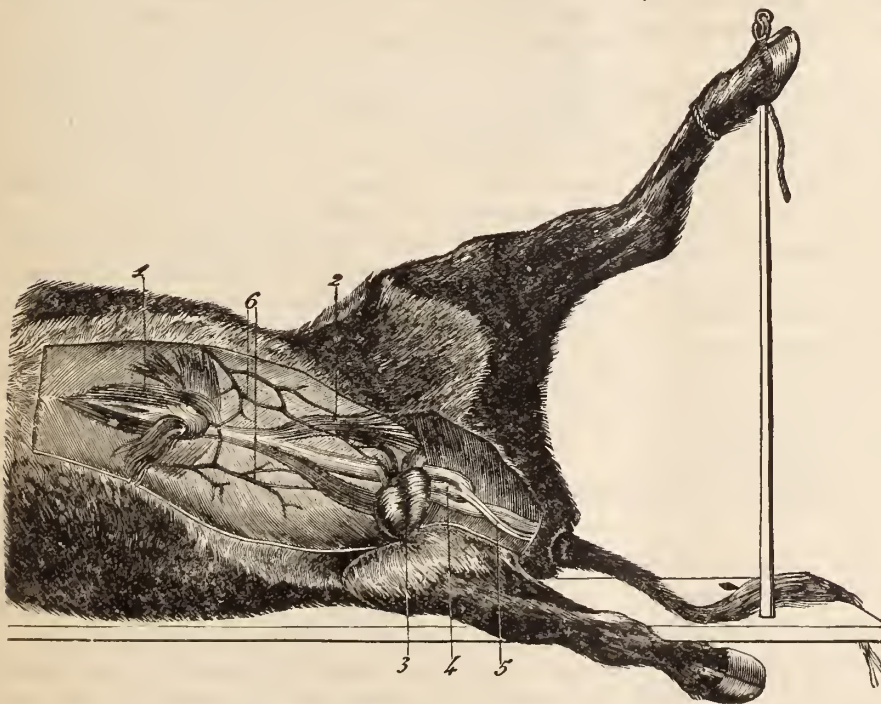


FIG. 3.—THE NORMAL PENIS AND MUSCLES OF THE SHEATH OF THE BULL.

1, Protractor muscle of the sheath; 2, Retractor of the same; 3, Testicles in the scrotum; 4, The *S* of the penis; 5, Suspensory cords of the penis attached to the second curve; 6, Subcutaneous abdominal vein. (From Chauveau's, "Anatomy of the Domesticated Animals.")

The intra-pelvic conditions were made apparent by separation of the arch. The bladder was contracted, very small, and exceedingly thick and muscular. The spermatic ducts were seen to enter a bicornated body, which at first seemed to be their normal ampullæ; but a more exact examination

course, wanting, while in the anterior curvature the coils were one above another, like those of a coil of rope. All this part of the penis was solid. This portion was about 10 ctm. in length.

The only portion of the penis which resembled the nor-

mal organ at all was the pars cavernosa. Its length was 3 ctm. On opening it, the numerous glandular ostia were seen to be wanting. The caput gallinaginis was strongly developed, with its peculiar trident-like extensions; there was no evidence of ostia for the seminal ducts or vesicles; and Cowper's glands were wanting, as well as the prostate and the seminal vesicles.

CASE OF DISLOCATION OF THE STERNAL END OF THE CLAVICLE.

BY B. A. CLEMENTS, M.D.,

SURGEON, U. S. ARMY.

THE history of this case of rather rare dislocation is transcribed from the original report in the office of the Surgeon-General of the army.

Sergeant S. Martin, General Mounted Service, a spare and active man, aged about thirty-six years, fell head foremost down a dry well at St. Louis Barracks, Missouri, on March 6, 1873. The well was sixteen feet deep, and at ten feet from the top there was a large projecting rock. He struck the latter with the back of his left shoulder.

The shock of the injury was considerable. On examination, the left shoulder and the back of his neck and of his left arm were found much scraped and bruised, but there was no fracture. The following morning it was seen that the sternal end of the clavicle was dislocated backward and somewhat downward.

Pulling the shoulders strongly backward, and at the same time placing the knee between the scapulæ, partly restored the bone to its proper position, but not entirely so, it being also necessary to pull up the end by the fingers, which procedure was not difficult owing to his lack of flesh. A large pad was put between his shoulders and he was laid on his back; this, however, did not suffice to keep the bone in position, and the ordinary rings and tapes, so useful in fractured clavicle, were applied, and with great success, the end of the bone being kept well in position.

The apparatus was removed on April 10th, five weeks after the receipt of the injury, and the bone found to be firmly joined to its attachments. He complained now solely of stiffness of his left shoulder, and inability to use his arm as well as formerly.

He continued under observation until August, and frictions and iodine were used to his left shoulder joint without much benefit. There was no swelling about the joint, but there was a shrinking of the deltoid—not great, but yet perceptible. He could raise his arm only to an angle of some sixty degrees. No improvement in this condition having occurred in the course of four months, he was discharged the service on August 3, 1873.

He would seem to have recovered in great measure the use of the deltoid, as a few months after his discharge he was employed in driving a street car.

This rare injury was caused, as will be observed, by the shoulder being driven forward and inward. The success of the treatment with the ring apparatus for fractured clavicle

was perfect, the dislocated bone being retained in position almost immovably.

Note.—A case of dislocation of the sternal end of the clavicle "upward" is mentioned in Part III of the "Medical and Surgical History of the War of the Rebellion," Surgical Vol., p. 646.

ARMY BUILDING, NEW YORK CITY,

September 3, 1883.

Book Notices.

Dr. G. Beck's therapeutischer Almanach. 10 Jahrgang, 1883.

Des Taschenbuches der neuesten Therapie III. Bändchen, 1. Heft. Bern: J. Dalp, 1883. 32mo, pp. 76.

THIS little book contains, in the briefest possible form, a series of classified references respecting the latest discoveries in therapeutics. Each disease in regard to which any therapeutic novelty is offered is found in its place, arranged according to a systematic classification, and under it the reference is made—usually to the "Index Medicus," Schmidt's "Jahrbücher," the "Jahresbericht" of Virchow and Hirsch, or some other periodical of the same class. For instance, under the head of the "apyretic dyscrasie" we find diabetes; and here, among other references, we read "Arsen. brom. Liq. 3 mal 1–3 Tr. p. die.—*Clemens, M. Z.* (83)." Which signifies: Clemens, in the "Medicinal-Zeitung" for 1883, recommends the use of solution of bromide of arsenic in doses gradually increasing from one to three drops three times a day. Sometimes the references are more explicit, as in the following: "Chin. sulf. 0.4, 2 mal p. die während 15–20 Tagen, Ind. bei Zuckerharn ohne functionelle Veränderungen, wahrscheinlich neuralgischen Ursprungs.—*Worms, M. Z.* (82), 449." In other cases the references are even more extended. In addition, very brief outlines of the bibliography of the more important subjects are given here and there throughout the book. Finally, there is an index of all the remedies mentioned, also an appendix containing such notices of preparations and their uses as do not naturally fall under the head of disease. The book is, in reality, just such an index rerum as a pretty-well-read man would make for his own use out of his own reading, and, like such an index, it will be valuable or not according as the reader uses it as a guide to his reading or as a substitute for it.

Atlas der Gelenkkrankheiten nebst diagnostischen Bemerkungen und einem Abriss der Anatomie der Gelenke. Von Dr. AUGUST SCHREIBER. Mit xxiii theilweise in Farbendruck ausgeführten lithographischen Tafeln und 56 Holzschnitten. Tübingen: H. Laupp, 1883. 4to, pp. viii–100. [Price, 12 M.]

THIS quarto volume is divided into two parts—namely, the anatomy of joints, and an atlas of diseases of the articulations. The former is very concise, and is illustrated with some excellent wood-cuts from Luschka's well-known work.

The second part consists of twenty-three lithographic plates and descriptions, illustrating diseases of all the joints. The plates are colored, so that the changes in the joint surfaces are apparent at a glance, and those devoted to pathological anatomy are excellent and well worth careful study. The wood-cuts in the first part are also exceedingly well done. We do not remember to have ever seen better work. If publishers would oftener put as good illustrations into books, it would add much to their value.

Materia Medica, for Physicians and Students. By JOHN B. BIDDLE, M. D., late Professor of Materia Medica and General Therapeutics in the Jefferson Medical College, Philadelphia. Ninth edition, revised, rewritten, and enlarged, in accordance with the Sixth Revision of the U. S. Pharmacopœia, by CLEMENT BIDDLE, M. D., U. S. N. With numerous illustrations. Philadelphia: P. Blakiston, Son & Co., 1883. Pp. xx-17 to 537, inclusive. [Price, cloth, \$4; sheep, \$4.75.]

BIDDLE's "Materia Medica" has long been a favorite text-book with medical students on account of its fullness of detail in botanical, chemical, and pharmaceutical matters, which in other works are so frequently slighted. In respect to therapeutics, too, it has had the reputation of being accurate and precise, although very brief. Its chief defect as a text-book, apart from the arbitrary character of its system of classification, has been its neglect of the physiological action of drugs. This defect the author has partially remedied in the present edition, and, although we think that he still errs on the side of brevity, his descriptions of the physiological action in the case of the more important drugs are systematic and accurate. His remarks on new remedies are in the main judicious. We have, however, looked in vain for some reference to quebracho and nitro-glycerin, and, although the author mentions the composition of the oil of wintergreen as a salicylate of methyl, he does not speak of the antarthritic action which it exerts in common with the other salicylates. Other remedies which have attracted more or less attention of late years, and which he does not describe, are the bromide and iodide of ethyl, quinine, coto bark, chaulmoogra oil, pyrogallie acid, and the Jamaica dog-wood (*Piscidia erythrina*). The author, we may note, is rather inconsistent in his use of terms, following the new pharmacopœia in general in the use of the termination *ina* for alkaloids, but still designating the alkaloid of cinchona as *quinia*.

In spite of these strictures, the book must still be regarded as very fairly brought up to the times, and calculated to serve as a reliable guide; and, as a manual for students, it is, in our opinion, an excellent one.

Experimental Pharmacology. A Hand-book of Methods for Studying the Physiological Actions of Drugs. By L. HERMANN, Professor of Physiology in the University of Zürich. Translated, with the author's permission, with notes and additions, by ROBERT MEADE SMITH, M. D., Demonstrator of Physiology in the University of Pennsylvania. With thirty-two illustrations on wood. Philadelphia: Henry C. Lea's Son & Co., 1883. Pp. 201.

This book is a treatise for the physiological laboratory, containing a clear and systematic description of the way in which experiments are to be conducted for determining the effects of drugs upon the animal organism. It describes in detail the methods and instruments employed in the investigation of the action of drugs upon tissues isolated from the organism, the methods of introduction of drugs into the system, the ways in which the transformation of drugs in the system and their elimination are observed, and the processes by which we estimate their action upon the functions of circulation, respiration, digestion, secretion, excretion, and reproduction, and upon the body—temperature and muscular and nervous energy. Such a work being entirely technical in character, there is little to say in criticism, especially when it is issued by a man so presumably competent as the professor of physiology in Zürich. It need only be said that Dr. Smith's additions, which occupy a good part of the volume, are judicious and useful, and that for the experimenter in animal physiology the book will possess considerable value.

The Scientific Transactions of the Royal Dublin Society. Vol. I (Series II), Parts xv, xvi, xvii, xviii, xix; Vol. II (Series II). Dublin, 1880-'82.

The Scientific Proceedings of the Royal Dublin Society. Vol. III (New Series), Part v, August, 1882.

OF these two publications of the Royal Dublin Society, the "Transactions" and the "Proceedings," the former are contained in volumes of rather appalling size, comprising a dissertation upon the Dyseystidæ, or carnivorous beetles (this paper alone covering a thousand pages and delineating fifteen hundred species), and smaller monographs describing certain comets discovered in 1881, the physical appearances of Jupiter, the Laurentian rocks of Donegal, the condition of the British Islands at different geological epochs (a very interesting contribution), and, finally, a series of photographs of spark-spectra of different elementary substances. The "Proceedings" appear in magazine form, and comprise papers upon the Varieties of Birds found in Navarro County, Texas, a Note on the Electro-Magnetic Action of a Moving Electrified Sphere, a New Form of Apparatus for estimating Ammonia in Potable Waters, a New Analysis of the Lucan Sulphur Spa, the Mode of Occurrence and Winning of Gold in Ireland, a List of the Parasitical Algæ of the Firth of Forth, and a Catalogue of the Examples of Meteoric Falls in the Museums of Dublin. The titles of these papers sufficiently indicate their character. To the purely medical man they will possess little interest; to those interested in the subjects of which they treat they will doubtless prove of great value.

Experimental Researches on the Tension of the Vocal Bands. (a) —*The Action of the Thyro-cricoid Muscle.* (b) —*The Action of the Expiratory Blast of Air.* By F. H. HOOPER, M. D., Boston, Assistant Physician to the Clinic for Diseases of the Throat, Massachusetts General Hospital, etc. Pp. 20.

DR. HOOPER's pamphlet describes experiments undertaken at the physiological laboratory of the Harvard Medical School to determine the character of the agencies which produce tension of the vocal cords. One of these is the contraction of the cricothyroid muscle. The mode of action of the latter has been disputed, no fewer than six different functions having been assigned to it. All these have been made on purely theoretical grounds, except in the case of four separate observers, all of whom experimentally determined that its action was to lift the anterior portion of the cricoid cartilage, the thyroid cartilage remaining stationary, while the posterior part of the cricoid cartilage, with its appendages, was depressed. This determination the author confirms by what appear to be perfectly conclusive experiments. He would, therefore, designate the muscle as the thyro-cricoid. The second factor in the production of tension of the vocal cords is the blast of air forced out in expiration with a closed glottis. This action, while lifting the whole larynx, raises the cricoid cartilage more than the thyroid; this being accomplished, according to the author, by an increase in the capacity of the laryngeal chamber produced by the sudden entrance of the current of air.

Die Arzneimittel der Pharmakopœa Germanica, editio altera, für die ärztliche Praxis übersichtlich zusammengestellt von Dr. Julius Grosser. Berlin: Verlag der Deutschen Medicinal-Zeitung, 1883. 16mo, pp. 5-29, inclusive.

THIS is simply a list of the preparations of the German pharmacopœia, with statements of their strength, solubility, and maximum doses. The arrangement is alphabetical, but the preparations are grouped under the head of the drug, and not as separate items.

BOOKS AND PAMPHLETS RECEIVED.

Enteric Fever: its Prevalence and Modifications, *Ætiology*, Pathology, and Treatment, as Illustrated by Army Data at home and abroad. By Francis H. Welch, F. R. C. S., Surgeon-Major, A. M. D. (Alexander Prize Essay, December, 1881—modified.) Philadelphia: Presley Blakiston, Son & Co., 1883. Pp. viii-190. [Price, \$2.]

The Treatment of Wounds: its Principles and Practice, General and Special. By Lewis S. Pilcher, A. M., M. D., Member of the New York Surgical Society. With one hundred and sixteen Wood Engravings. New York: William Wood & Co., 1883. Pp. xii-391. [Wood's Library of Standard Medical Authors.]

Elements of Histology. By E. Klein, M. D., F. R. S., Joint Lecturer on General Anatomy and Physiology in the Medical School of St. Bartholomew's Hospital, London. Illustrated with one hundred and eighty-one Engravings. Philadelphia: Henry C. Lea's Son & Co., 1883. 12mo, pp. xii-352. [Students' Series of Manuals.]

A Pocket-Book of Physical Diagnosis of the Diseases of the Heart and Lungs. For the Student and Physician. By Dr. Edward T. Bruen, Demonstrator of Clinical Medicine in the University of Pennsylvania, etc. Second Edition, Revised, with Additional Illustrations. Philadelphia: P. Blakiston, Son & Co., 1883. Pp. 228. [Price, \$1.50.]

The Essentials of Bandaging; with Directions for Managing Fractures and Dislocations, for administering Ether and Chloroform, and for using Other Surgical Apparatus, and containing a Chapter on Surgical Landmarks. Illustrated by one hundred and thirty-six Engravings on Wood. By Berkeley Hill, M. B. Lond., F. R. C. S., Professor of Clinical Surgery in University College, etc. Fifth Edition, Revised and Enlarged. New York: J. H. Vail & Co., 1883. Pp. xiii-341.

The Roller Bandage. By William Barton Hopkins, M. D., Surgeon to the Out-Departments of Pennsylvania, Episcopal, and University Hospitals, etc. With seventy-three Illustrations. Philadelphia: J. B. Lippincott & Co., 1883. Pp. 95. [Price, \$1.25.]

Outline Diagrams of the Ear, for the Pictorial Record of Diseases of this Organ and its Connections. For the Use of Practitioners, Students, and Clinical Assistants. Cincinnati: A. E. Wilde & Co.

Medical Student's Guide to the City of New York. New York: J. H. Vail & Co., 1883. Pp. 32.

Medical Bibliography. By John S. Billings, M. D., Surgeon, U. S. A., etc. [Reprint from the "Transactions of the Medical and Chirurgical Faculty of Maryland."]

The Fallacies of Popular Clinical Medicine. By Jarvis S. Wight, M. D., Professor of Surgery. An Introductory Lecture delivered at the Long Island College Hospital.

Observations on the Management of Enteric Fever according to a Plan Based upon the so-called Specific Treatment. Read before the College of Physicians of Philadelphia. By James C. Wilson, M. D., Physician to the Jefferson Medical College Hospital, etc. [Reprint from the "Transactions."]

Ambulance Service in Philadelphia. By De Forest Willard, M. D., Surgeon to the Presbyterian Hospital, etc.

Club-Foot: Simple Measures for its Relief. By the same. [Reprint from the "Transactions of the Medical Society of the State of Pennsylvania."]

Adherent and Contracted Prepuce, commonly called Congenital Phimosis. By the same. [Reprint from the "Philadelphia Medical Times."]

Case of Adeno-sarcoma of Mammary; Removal of Growth; Recovery. By James Whitson, M. D., etc. Reprint from the "Lancet."]

Cases of: I. Rudimentary Uterus and Vagina. II. Cyst of Gartner's Canal. A Paper read before the Maine Medical Association, June 12, 1883. By Stanley P. Warren, M. D., of Portland.

Announcement of the Philadelphia Polyclinic and College for Graduates in Medicine. Sessions of 1883-'84.

Correspondence.

LETTER FROM MOBILE.

The Medical College of Alabama.—The late Dr. J. C. Nott.—Succeeding Members of the Faculty.—The City Hospital.—The Providence Infirmary.—The Mobile Medical Society.—The State and County Boards of Examiners.

MOBILE, August 27, 1883.

THE Medical College of Alabama, located in this city, dates its existence back to 1859, and will therefore, in another year, be entitled to celebrate its quarto-centennial anniversary.

The eminent and lamented Dr. J. C. Nott, or, as he was familiarly styled among his professional brethren, "The Old Roman," was, perhaps, the leading spirit in the conception and inauguration of the enterprise.

Possessing a vigorous and broad intellect and entertaining comprehensive views on all subjects, manifesting throughout his professional life a genuine devotion to the science of medicine and a princely courtesy for those engaged either in the practice or study of it, and withal full to overflowing of personal magnetism, he was pre-eminently the man to take the lead in founding and organizing an institution of medical learning.

As a scientist and surgeon, his fame was both extensive and brilliant. In the former capacity he was best known as an ethnologist, and as the author, in connection with George R. Gliddon, the distinguished Egyptologist, of "Types of Mankind" and "Indigenous Races of the Earth"—both works having attracted much attention both in this country and in Europe. Many other contributions to the medical and scientific press helped to give him prominence as a man of learning. As a surgeon, his fame was unsurpassed in the South or Southwest except by that of the distinguished Dr. Warren Stone, of New Orleans, between whom and Dr. Nott the warmest friendship existed, each according to the other great skill and talent.

His reputation as a surgeon, as a matter of course, fixed his position as professor of surgery in the formation of the first faculty.

Those who sat under his teachings will remember the force and distinctness with which he enunciated the principles, and the skill and dexterity with which he executed the practice, of the great art of surgery.

In the work of organizing the college he received the hearty co-operation and assistance of the profession generally of Mobile, and the material aid of many of the citizens. Among the former may be mentioned Dr. F. A. Ross, Dr. W. H. Anderson, Dr. George H. Ketchum, Dr. J. F. Heustis, and Dr. G. Owen, all of whom became members of the original faculty, and have so continued to the present time.

Dr. Ross, after having ably filled the chair of materia medica and therapeutics for a number of years, offered his resignation, which was accepted, and he was placed on the emeritus list. He was worthily succeeded by Dr. E. H. Fourrier, who, in his teaching, endeavors to make philosophy and medicine inseparable companions.

Dr. Anderson and Dr. Ketchum continue to fill their original

chairs—those of physiology and the theory and practice of medicine, respectively—than whom it would be difficult to find more fluent or able lecturers.

Dr. Henstis was transferred, a number of years ago, from the chair of anatomy to that of surgery, where he found a wider field for his skill and learning.

Dr. Owen long since won promotion from the demonstratorship of anatomy to the professorship of obstetrics and diseases of women and children.

At a little later period than the first organization, Dr. E. P. Gaines became a member of the faculty, and so continues, as professor of physical diagnosis and diseases of the chest—a field to which he brought great fitness, experience, and enthusiasm.

The names of Dr. J. T. Gilmore and Dr. Jerome Cochran may be mentioned as having been connected with the faculty—the former as one of the most brilliant and rising surgeons in this country, who fell an early victim to disease; the latter in the capacity of professor of chemistry and hygiene, now the able and efficient Health Officer of the State, and the leader in a great reformation which has been wrought in the medical affairs of Alabama.

In aid of the college the State made a handsome appropriation, which amount was supplemented by liberal contributions from certain citizens of Mobile and members of the original faculty—the aggregate having been amply sufficient to erect a commodious and imposing college building, and to equip it with complete and admirable appointments. When the building was approaching completion, Dr. Nott, supplied with abundant funds, proceeded to Europe and expended more than fifty thousand dollars in the purchase of a museum, a collection of materia medica specimens, and such apparatus and appliances as were necessary for teaching the science of medicine.

In all these respects, therefore, the institution was placed, at the very outset, upon a superior plane of equipment for fulfilling the purposes of its foundation.

With an interregnum in its exercises during and immediately after the Civil War, the college has gone on doing what it could to educate young men, and has always held, and still holds, itself ready to unite with the other colleges of the country in any effort looking to the elevation of the standard of medical education, the lengthening of the time of study, and the adoption of a graded course.

Its corps of teachers now consists of eleven professors and lecturers, and five adjuncts and demonstrators. Endeavoring to keep pace with the growth of medical science, it added, several years ago, to its curriculum of study the special branches of diseases of the eye and ear, and last year those of histology and pharmacy. An admirable laboratory has been arranged for teaching microscopy, and is supplied with a sufficient number of Hartnack's microscopes. The clinical facilities are convenient and ample.

The City Hospital, the charity provided for the indigent sick of the city and county, is under the entire control of the faculty, and its wards, where clinics are daily held, are thrown freely open to the students.

The Providence Infirmary, an institution under the care of the Sisters of Charity, and combining elegance and comfort in its appointments, is thrown open in the same free way to the class.

On three days of the week clinics are held at the college for out-door patients, including diseases of the chest, diseases of children, and diseases of the eye and ear. Both here and at the hospital every effort is made to bring the students in close contact with the sick, and to encourage them to make examinations for themselves.

While utilizing all clinical material to the best advantage,

didactic teaching is neither underrated nor lost sight of. From five to seven lectures are given daily at the college during the session, which are intended to convey that sort of instruction without which clinical teaching would be of little value.

As one of the auxiliaries, so to speak, of the college, may be reckoned the Mobile Medical Society—an organization that antedates the former by about twenty years, and whose vigor and usefulness continue to improve with advancing age.

It comprises in its membership four fifths of the active practitioners of the city, and holds weekly meetings in a well furnished hall provided for its exclusive use. On an average, these meetings do not fail once in the year. At every alternate meeting "Reports of Cases" is made the order of business, and each member is allowed and expected to report the general character of sickness which has fallen under his observation for the previous two weeks, and to detail the histories of cases of any special interest.

The relating of such cases often arouses animated discussions, and, in the analysis reached thereby, obscure points in diagnosis are cleared up, and valuable suggestions as to treatment are made.

At the intermediate meetings papers are read, or discussions held upon definite medical subjects, in which the members generally participate. Thus the business alternates from week to week, and goes on from year to year.

It will be seen that attendance on these meetings will enable one to keep himself informed not only as to the character of prevailing sickness, but as to the histories of all the important and interesting cases occurring in the practice of a large number of physicians. The papers read and the discussions held serve to widen the information and sharpen the argumentative powers of the members.

The students of the college are invited to these meetings with the hope that, by becoming familiar with the manner in which the business of a well-organized medical society is conducted, they will appreciate the advantages of such organizations, and either desire to participate in them where they already exist, or take the lead in organizing new societies.

In Alabama and Mississippi the troubles of the young M. D.'s are not over when the colleges have conferred diplomas upon them.

Before they can be allowed to enter into practice they must undergo an examination by the State.

In Alabama this examination is held either by the State Board of Medical Examiners, elected by the State Medical Association, or by a county board of examiners, elected by the county medical societies.

The examinations, partly oral and partly written, are rigid, and are made to cover the whole range of medicine.

This law has now been in operation some five years or so, and already has markedly improved the tone of the profession, and has entirely banished quackery from the State.

In Mississippi the arrangement of the examining boards is somewhat different from that in Alabama; but there, too, the character of the examinations is said to be rigid and searching.

The instances are already numerous, and growing more so, in which a young doctor—returning with diploma in hand, honors upon him, and visions of fees and patients before him—has found himself ingloriously "plucked" by one of these overhauling boards, and has been compelled, in consequence, either to pursue his studies further, or to emigrate to some State where a diploma, however undeserved, is a license to practice.

So far, none of these instances have occurred to the alumni of the Medical College of Alabama, and, if she continues to be wise, the contingency of their happening in the future will be reduced to a minimum.

THE
NEW YORK MEDICAL JOURNAL,
A Weekly Review of Medicine.

Published by
D. APPLETON & Co.

Edited by
FRANK P. FOSTER, M. D.

NEW YORK, SATURDAY, SEPT. 22, 1883.

LAST YEAR'S EPIDEMIC OF DENGUE IN BERMUDA.

IN January last the Governor of the Bermuda Islands appointed commissioners to inquire into the origin and history of the epidemic of dengue which prevailed in the islands in 1882, and the points they were instructed to consider were: 1. The origin and course of the epidemic. 2. Whether the quarantine laws or regulations required amendment, and in what manner. 3. Whether the administration of those laws called for amendment, and in what direction.

The Commissioners find that the epidemic had its origin in H. M. S. Sparrowhawk, a small wooden surveying vessel which left Nassau, N. P., for Bermuda, with a promiscuous crew of eight or nine men, on the 22d of July, 1882, and arrived at Hamilton on the 31st of the same month. Dengue was prevalent at Nassau when the Sparrowhawk left that port, her commander having had the fever there. During the passage one of the crew had the disease. On the 4th of August another one of her men was seen by the surgeon of the Terror, and this was believed to be the first case in Bermuda. The fever subsequently appeared among the persons employed in the dock-yard, on the 10th or 11th of August, and the outbreak was connected with the Sparrowhawk, as it is in evidence that before her arrival the health of the island and of the dock-yard was good. The Commissioners take up this question in some detail, and find that the Sparrowhawk was hove down to be cleaned in the camber, close under the bows of H. M. S. Spitfire, which up to that time had been in a healthy state, and that the men on board the two ships mingled together freely, those from the Spitfire having been employed in cleaning the Sparrowhawk. They also slept at night within a few feet of the latter vessel.

Within a few days after the 10th of August several men were sent from the Spitfire to the Royal Naval Hospital, and, the disease not being recognized, they were isolated in the fever ward. The fever spread rapidly from the men thus brought in to the medical officers and nurses in the hospital, from the latter to their families in their immediate neighborhood, and from the medical men and attendants to the other patients in the hospital, sixteen of whom, out of nineteen who were in the hospital for other complaints, contracted it. The same fever broke out among the crews of the Urgent and Terror, and they were hulked on board the Irresistible, together with the crew of the Sparrowhawk, August 18th. About the 15th of August an officer of the dock-yard, whose duties took him on board the Sparrowhawk, contracted the fever, and all his family were attacked with it. While the fever was prevailing, H. M. S. Foam arrived from Halifax with a healthy crew. She brought

a prisoner for the naval prison at Hamilton. In forty-eight hours after being placed in the cell he was taken with the prevailing disease. There was no other person in the prison at the time, but there had been fever in it, and the cells had been whitewashed. From the dock-yard the fever spread rapidly, first to Somerset, the part of the colony nearest to the Naval Hospital, and then to the other parts of the islands, and in four or five weeks after the arrival of the Sparrowhawk it prevailed generally throughout the colony. One medical man who visited the Royal Naval Hospital early in October, to ascertain the nature of the fever, about which very exaggerated reports had appeared in foreign papers, states that he himself had an attack four or five days after visiting the hospital, and then his family was attacked, there having been no fever previously in his neighborhood.

The Commissioners remark that no one who examines the evidence can doubt that the original focus of the disease was the dock-yard, that it gradually but rapidly traveled from that center to all parts of the colony, and that there is nothing to account for its original appearance at that center but the sanitary state of H. M. S. Sparrowhawk and her crew. While there was no fatality attending the disease, the Commissioners believed it to be infectious and contagious. It was not regarded as having any connection with yellow fever, although the fact is mentioned in the report that some practitioners regard it as a modified form of that disease. The Commissioners found that the administration and the quarantine laws were in general efficient, and that they would prove adequate to prevent epidemics of dangerous fevers if rigidly enforced.

A new feature in this report is a proposition to divide infectious diseases into two classes. The report says: "The Commissioners think it deserves consideration, whether infectious diseases may not be classified under two heads, distinguishing those most likely to be imported, and exceptionally infectious, from others of either a less infectious or less serious nature, or with respect to which the danger of importation is smaller. To the former class the most rigid quarantine regimen should be applied. It might suffice with the other class to enforce precautions and restrictions of a less stringent nature."

The classification proposed for consideration is:

A.	B.
Yellow fever.	Typhus.
Scarlet fever.	Typhoid or enteric fever.
Small-pox.	Relapsing fever.
Cholera.	Measles.
Diphtheria.	Chicken-pox.
Plague.	Dysentery.
Dengue.	Croup.
Whooping-cough.	

"The class A," the report continues, "comprises those diseases against the importation of which it is impossible to be too guarded, and class B those which require great vigilance, but not the same severe restrictions."

In regard to the general administration of quarantine the report says: "The Commissioners are far from thinking that a

mere categorical examination of this kind would be any sufficient substitute for the intelligent investigation of a vigilant health officer, or that the officer should be thereby relieved from the duty of making a thorough examination of the sanitary condition of a ship as required by law. But circumstances elicited in evidence before the Commission show that such a mechanical inquiry as is here suggested may prevent serious oversights and hasty conclusions."

It appears from the foregoing that the opinions of Lord Granville relative to the efficacy of quarantine, or, rather, his belief in its inefficacy, are not shared by the British colonies near infected regions. No American port has ever yet gone so far in observance of quarantine as to consider dengue necessary to be excluded.

THE INDIANA STATE BOARD OF HEALTH AND ITS LATE SECRETARY.

A STATE board of health without a quarrel on its hands is getting to be an uncommon spectacle. The Indiana board has become involved in a controversy with an Indianapolis physician who was formerly its secretary, and, we infer, still considers himself as secretary *de jure*, although the board removed him last March, and chose a successor, who entered upon the duties of the office. The board furnished the deposed secretary with a written statement of the reasons for his dismissal—substantially, that his penmanship was too bad; that his statements as to the business and work of the board had been "wavering, loose, and indirect," so that he had kept the board uncertain as to what he had done and what he was going to do; that his minutes had been kept incorrectly, making it appear in some instances that the board had done things it had not done; that he had hired a clerk without the approval of the president of the board, as required by law, and at an extravagant salary; and that he had committed the board to needless expenditure for furniture and supplies for its office. But what brought things to a climax, the board aver, was the secretary's refusal to resign at a particular time, as he had promised to do.

The secretary naturally felt annoyed at the turn affairs had taken, but, very sensibly declining to go to law over the matter, has relieved his mind by a written defense read before the Indiana State Medical Society and entered on the society's minutes. In this vigorous document the secretary frankly admits and laments his lame penmanship, but hints that he has no ambition to become a writing-master, and avers that the president of the board is not a paragon in orthography. He states that his minutes were invariably approved by the board, whereas, if they had been of the character alleged, the board ought not to have taken such action on them. As to the clerk he hired, he maintains that one had to be had, and that the board practically justified his action by finally employing a more expensive clerk than the one in question. He adds that some of the office supplies that the board now profess to have considered unnecessary they took quite a fancy to at the time, several of the members taking a portion away with them for their own use. His promise to resign, he maintains, was con-

ditional, and he states that the condition was violated by some member of the board. Finally, he hints that a snare was laid to convict him of negligence or incapacity by causing a stenographer to claim his warrant for compensation for reporting the proceedings of the board-meeting at which the secretary was given a hearing, the stenographer submitting to him the notes of certain proceedings in court involving some matters connected with horses, in lieu of the real notes of the meeting.

It seems that there had been trouble between the secretary of the board and the Secretary of State, who was also a physician, and that the latter finally succeeded to the former's position, and the deposed official hints rather broadly that it was to lead up to this change that his own resignation was requested.

Without presuming to solve the merits of the dispute, we may characterize the secretary's defense as very entertaining matter. We must add our regret, however, that the occasion that called it forth should ever have arisen.

A SOCIETY OF MEDICAL CLIMATOLOGY.

In our news columns the reader will find a notice of a meeting of gentlemen well known in connection with the study of climate in its bearings on disease, particularly pulmonary disease, to be held in New York on the 25th inst. It is encouraging to note that those who have signified their intention of joining in the object of the meeting, the organization of a society for the purpose of facilitating and systematizing the pursuit of investigations in this direction, belong in widely distant parts of the country, many of them living in localities much resorted to by phthisical patients. The field in question seems one of the most promising for "collective investigation," and it is to be hoped that, being brought face to face with each other, and perhaps held somewhat in check by those of their associates who are under no bias in favor of one health resort as opposed to another, the members who come from the various localities claiming the approval of the profession may really be made to see that their natural preferences must be cast aside as the first step in an intelligent and useful study of the subject they have in hand.

We may be allowed to suggest that the title proposed for the new society—"Association for Diseases of the Respiratory Organs and Climatology"—is somewhat cumbersome and illogical. So far as we are aware, diseases, whether those of the respiratory organs or those of any other sort, do not congregate and form associations, and if they did they would scarcely admit climatology to membership, although they might make it a patron. Furthermore, the name is too narrow in its scope. If the machinery necessary for studying the influence of climatic conditions on the human system is really to be set in motion, it seems a pity that no other departments of medicine than that relating to pulmonary diseases are to be benefited. But, whatever title the organization may determine to be known by, we have no doubt that its work will prove of signal advantage to medicine.

AN UNFOUNDED CHARGE OF MALPRACTICE.

THE tendency to conceal criminal abortions on the part of the victims' relatives is a well-known impediment to the course of justice, and a serious hindrance to the operation of laws designed to do away with the foul blot on our civilization involved in the practice of destroying embryonic life. Irritating and discouraging as it is to bring up continually against this obstacle, its foundation in a feeling of honor and loyalty can not but be recognized nevertheless. A case has lately happened, however, in which the opposite course is reported to have been taken under circumstances that render it not only surprising but offensive. It seems that a woman of questionable repute, being at the same time a *femme entretenue* and a so-called *clairvoyante*, had a daughter whom she treated in such a way as to alienate her, and cause her to take refuge in the family of a gentleman with whose daughter she had contracted a friendship. There is no reason to suppose that her life was not perfectly correct, but she was attacked with uterine cancer, and by the time adequate medical attendance was secured it was found that the disease had advanced to a degree past all hope from surgical interference. Her death was therefore looked forward to as almost certain to take place within a few months, and last month she died. A proper certificate was given by her physician, and the poor girl was buried.

Now the unnatural mother appears upon the scene, professing to suspect that her daughter died, not of cancer, but of the results of a criminal abortion, and intimating that there had been improper relations between her and the gentleman who had kindly taken her into his family. As may well be imagined, this course on the part of the mother is not the outcome of any conscientious desire to see justice done, but seems to be prompted by mercenary motives, and to be part of a plot to break a will the daughter had made, the latter having, with the assistance of her protector, found her father, whom she had been taught by her mother to consider dead, and the father having since died and left her some property now in litigation.

The woman having laid her suspicions before a coroner, that officer ordered an exhumation and a medical examination of the body. Although some surprise has been felt that he should have taken that course on such grounds, we are unable to see how he could reconcile it with his duty to do otherwise, since an officer of the law is scarcely at liberty to pronounce against an accuser's good faith in advance, be the person never so disreputable. Apart from that consideration, too, in no other way could the poor girl's reputation, and the conduct of her friends and her medical advisers, be more cogently vindicated.

The lesson to be learned from the revolting incident is, that, in view of the extreme reluctance with which criminal abortion is admitted by the kindred of its victims, the public is only too likely to put unquestioning trust in accusations of that sort coming from a relative; and the danger is, that a class of reprobrates will arise capable of seizing upon this weakness on the part of the public to further their own base purposes. If this fear should be realized to any great extent, of course there will be a reaction; accusations made in good faith will then have

ceased to have their present force, and convictions for criminal abortion will become even more difficult than now.

MINOR PARAGRAPHS.

THE MISSOURI STATE BOARD OF HEALTH.

THE Board of Health of the State of Missouri, lately organized under an act approved during the current year, includes the following members: Dr. E. H. Gregory, of St. Louis, president; Dr. G. M. Cox, of Springfield, vice-president; Dr. J. C. Hearne, of Hannibal, secretary; Mr. G. T. Bartlett, of Poplar Bluff; Dr. W. B. Conery, of St. Louis; and Dr. H. F. Hereford, of Kansas City. The late Dr. P. D. Yost was a member of the board at the time of its organization. We have not learned that an appointment has been made to the vacancy caused by his death. An appropriation of \$6,000 constitutes the entire pecuniary resources of the board, and the secretary is the only salaried member, the others simply drawing upon the fund to cover expenses incurred in their official work. It strikes us that the appropriation is scarcely adequate to the sanitation of the great State of Missouri.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

It is seldom that a summer number of a medical journal, or any other number for that matter, contains such excellent editorial writing as is to be found in our contemporary's issue of September 6th. We allude more particularly to its leading article, "Medical Men and the 'Classical Fetich.'" We may add that we share the writer's feeling of regret that classical studies "are losing the place which they formerly held as the only orthodox gateway to our profession."

AN AWKWARD TRIBUTE TO THE FOUNDER OF THE "LANCET."

IN a leading article in a recent issue of the "Lancet" we find mention of a certain practical reform which the founder of that journal advocated, in his peculiarly telling style, fifty years ago, but which, it seems, has not yet been accomplished. "Mr. Wakley," the article goes on to say, "was a practical man. He did not trouble himself with ideal grievances and reforms. Hence every reform but this, which his clear vision saw to be necessary, has been achieved." Does the writer really mean that the reform in question has failed because the late Mr. Wakley was a practical man, and did not trouble himself with ideal grievances and reforms?

AN EVASION OF QUARANTINE.

ACCORDING to the "Sanitary News," the captain of a vessel that had been quarantined off New Orleans lately succeeded in reaching the city by a roundabout journey that suggests to the "News" "a weak point in quarantine law." It seems that the mariner in question, finding no possibility of reaching the city directly from the quarantine station, took passage for New York by steamer, and then pursued his journey to New Orleans by land.

A NEW SOURCE OF DANGER FROM INFECTION.

IT is well known that in articles of chinaware that have been in use for some length of time the glazing shows a network of cracks, thus allowing liquids to penetrate into the porous material of the ware. In a recent communication to the French *Académie des Sciences*, M. Peyrusson expressed the opinion that minute organisms might readily find lodgment within the crevices of china vessels, and be taken into the system, with the consequent danger of communicating infectious diseases.

A NEW SPANISH JOURNAL.

THE multiplication of Spanish medical journals of late is remarkable. The last that has come to our notice is entitled "El Ensayo Médico," published at Caracas, and edited by Dr. Dorotheo De Armas, Dr. F. Monroy Gonzalez, and Dr. David Lobo. It is an eight-page monthly.

NEWS ITEMS.

INFECTIOUS DISEASES IN NEW YORK.—We are indebted to the Sanitary Bureau of the Health Department for the following statement of cases and deaths reported during the two weeks ending September 18, 1883:

	Week ending Sept. 11.		Week ending Sept. 18.	
	Cases.	Deaths.	Cases.	Deaths.
Typhus	0	0	0	0
Typhoid fever	83	27	69	13
Scarlet fever	36	7	38	14
Cerebro-spinal meningitis	3	2	3	3
Measles	60	6	22	2
Diphtheria	21	15	19	14

TYPHOID FEVER.—It will be seen by the foregoing table that in the two weeks ending September 18th there have been reported one hundred and fifty-two cases of typhoid fever and forty deaths. The comparative statistics of 1882 and 1883, as given in the report of Dr. Day, the Sanitary Superintendent, show a marked increase of the disease during the year over that for 1882. In January, 1882, there were forty-six cases, and forty-seven during the corresponding month of this year. In July, 1882, there were forty cases, and ninety-three in July, 1883. In August, 1882, there were ninety-six cases, and during last month there were two hundred and forty-four. The Board of Health has issued a circular calling attention to Dr. Day's report, and urging the adoption of means to prevent a further spread of the fever.

YELLOW FEVER.—A violent outbreak has occurred in Guaymas, a sea-port town in Mexico. Twenty-six deaths were reported up to the 18th inst., among which were those of several Americans. Reports from Hermosillo and Mazatlan state that the fever is raging in those towns.

Mail advices from Rio Janeiro show that the disease still prevails there, though confined mostly to the shipping.

On Friday three new cases were reported from Pensacola, with one death. On Monday there were four new cases and three deaths, and on Tuesday no new cases and but one death. Pensacola has quarantined against Mobile.

A brig, which had seven cases of yellow fever on board while at Havana, was reported to have sailed for Philadelphia on the 12th inst.

The quarantine has been removed from Cape Charles, Virginia.

MALIGNANT DIPHTHERIA is raging in a portion of Hartford, Conn., where there is a quantity of stagnant water. Several deaths have already been reported.

SMALL-POX has made its appearance in Nashville, Tenn., and several deaths have occurred. Unsuccessful efforts have been made to have two or three patients removed to the pest-house.

LEPROSY AT SAN FRANCISCO.—A case of leprosy was brought to San Francisco in a steamer which arrived from Honolulu last week. The quarantine officers refused permission to land.

PLEURO-PNEUMONIA IN PENNSYLVANIA.—Pleuro-pneumonia has made its appearance among the cattle in the counties of Delaware, Chester, and York, and about three hundred and fifty

animals have been killed to prevent a further spread of the disease, which it is thought is now under control. The disease has been traced to a herd of cattle brought from Baltimore and sold in West Chester.

THE FOOT AND MOUTH DISEASE seems to be increasing in England, as shown by late returns from the agricultural districts.

THE INSANE OF LYNN, MASS.—The overseers of the poor of Lynn intend visiting the State hospitals with a view to ascertain whether a portion or the whole of the fifty insane persons from that city can not be more economically cared for at the Lynn Almshouse. The average cost of maintenance at the hospital is about four dollars a week for each individual, while in the almshouse the cost is only \$2.30 a week.

THE CONNECTICUT HOSPITAL FOR THE INSANE.—At a quarterly meeting of the trustees of this institution, held on Thursday, the 13th inst., it was decided that at the close of the current quarter the rate of board shall be reduced from \$4 to \$3.75 a week. It is estimated that this will save the State several thousand dollars a year. There are at present in the hospital eight hundred and fifty-seven patients, comprising the "pauper" insane, the "indigent" insane, for both of which classes the State pays one half, the "soldier" insane, cared for wholly by the State, and the insane who are supported by their friends.

AN ASSOCIATION FOR DISEASES OF THE RESPIRATORY ORGANS AND CLIMATOLOGY.—A meeting for the purpose of organizing this association will be held in the parlors of the Academy of Medicine, in this city (12 West Thirty-first Street), on Tuesday, September 25th, at 10 A. M. The circular states that it is of the utmost importance that as many colleagues as possible should attend this preliminary meeting. The following gentlemen have signified their intention of becoming members of the association: G. M. Garland, M. D., F. I. Knight, M. D., F. C. Schattuck, M. D., Frank Hooper, M. D., of Boston; H. D. Didama, M. D., of Syracuse; A. L. Loomis, M. D., James R. Learning, M. D., Beverley Robinson, M. D., E. Darwin Hudson, M. D., D. M. Cammann, M. D., J. Hilgard Tyndale, M. D., J. W. Gleitsmann, M. D., of New York; E. T. Bruen, M. D., J. C. Wilson, M. D., J. Solis Cohen, M. D., Carl Seiler, M. D., J. B. Walker, M. D., of Philadelphia; B. F. Westbrook, M. D., Samuel G. Armor, M. D., P. H. Kretschmar, M. D., of Brooklyn; E. Fletcher Ingals, M. D., H. A. Johnson, M. D., of Chicago; W. C. Glasgow, M. D., of St. Louis; Richard McSherry, M. D., Frank Donaldson, M. D., of Baltimore; A. Y. P. Garnett, M. D., of Washington; W. H. Geddings, M. D., of Aiken; F. D. Lente, M. D., of Palatka; Charles Denison, M. D., of Denver; Talbot Jones, M. D., of St. Paul; E. L. Shurley, M. D., of Milwaukee; M. F. Coomes, M. D., of Louisville; E. W. Schautfler, M. D., of Kansas City; D. N. Kinsman, M. D., of Columbus; Boardman Reed, M. D., of Atlantic City.

COLLEGE OF MIDWIFERY.—The following changes have been made in the faculty: Dr. Sarah E. Post has been appointed Professor of Physiology, in the place of Dr. John Alsdorf, who has taken the chair of Diseases of Pregnancy and Parturition. Dr. Henry F. Hessler has been appointed Professor of Clinical Midwifery and German Instructor in Obstetrics. The sessions have been extended to six months—three months of didactic instruction and three months of clinical work.

PROFESSOR C. F. CHANDLER has signified his acceptance of the nomination to be a member of the commission to be appointed by the President to investigate the alleged prevalence of disease among swine.

ST. BARTHOLOMEW'S HOSPITAL, LONDON.—Dr. Dyce Duckworth has been appointed a physician to the hospital, to fill the

vacancy caused by Dr. Southey's having been made a Commissioner in Lunacy.

HARVARD MEDICAL SCHOOL.—Dr. H. P. Bowditch has been elected Dean of Harvard Medical School, to fill the vacancy caused by the resignation of Dr. Calvin Ellis.

ANATOMICAL CHAIRS IN DUBLIN.—According to the "British Medical Journal," there is a probability that Dr. D. J. Cunningham, one of the professors of anatomy in the Royal College of Surgeons in Dublin, will be elected to fill the chair of Anatomy and Surgery in the School of Physic of the University of Dublin, vacated by the appointment of Professor Alexander Macalister to the chair of Anatomy in the University of Cambridge. Dr. Francis T. Heuston has been appointed Lecturer on Anatomy in the Carmichael College of Medicine, in place of the late Dr. J. H. Loftis Stoney.

A FREE DISPENSARY IN BALTIMORE.—A free dispensary has been established in Baltimore for the treatment of women and children. Dr. L. E. Neale is the physician in charge, and Dr. W. G. Miltenberger is consulting physician.

PHILADELPHIA PHYSICIANS to the number of eight were recently summoned before the Health Board for failing to report cases of diphtheria which they had attended.

QUACKERY IN WEST VIRGINIA.—Another quack, described by a Wheeling newspaper as "a long-haired mountebank, calling himself 'Dr. Johnson,'" has been frightened out of West Virginia by the energetic proceedings begun against him by Dr. J. E. Reeves, the secretary of the State Board of Health.

A DRUGGIST EXONERATED.—Dr. F. Pleible, a druggist in Philadelphia, who was accused of causing the death of a young woman in July last by a mistake in dispensing a prescription containing morphia, was on Tuesday last freed from all blame by a report of the result of an analysis of the powders which had been made by Professor J. J. Reese, who said that the amount of morphia contained in the powders was not sufficient to be injurious.

A DISHONEST APOTHECARY PUNISHED.—A Paris apothecary, one M. Lacombe, having been convicted of furnishing the *Assistance publique* with false sulphate of quinine, was lately sentenced to a year's imprisonment and to pay a fine of 50f. It was ordered, in addition, that a copy of the judgment should be affixed for twenty-four hours to the door of his shop, and that the document should be published in two of the newspapers. An appeal having been taken, the appellate court has confirmed the decision, but has remitted that part of the penalty that required the insertion of the judgment in the newspapers.

OBITUARY NOTES.

SYLVESTER F. MIXER, M. D., OF BUFFALO.—Dr. Mixer died on Sunday, the 16th inst., at the age of sixty-eight. He was born in Morrisville, N. Y., December 27, 1815, and was graduated from the Medical Department of Yale College in 1841, and in that year began the practice of medicine in Buffalo. In 1847 he took the degree of M. D. from the College of Physicians and Surgeons in this city. He was a member of the Medical Society of the State of New York, and of the Buffalo Medical Society, of which he was president in 1852. He was also a member of the Medical Society of the County of Erie, and of the American Medical Association, and from 1858 to 1874 was attending physician to the Buffalo City Hospital, to which institution he was subsequently appointed consulting physician.

LOUIS F. PELTON, M. D., OF MOUNT KISCO, N. Y.—Dr. Pelton died at his home on Monday, the 17th inst. He was a na-

tive of Bedford, N. Y., and was graduated from the Medical Department of the University of the City of New York in 1847. He was a member of the Medical Society of the State of New York, and of the Westchester County Medical Society, of which he was one of the officers, and for many years he was president of the Board of Education of Mount Kisco. During the Civil War he acted as examining surgeon for the county.

J. H. JEROME, M. D., OF SAGINAW CITY, MICH., died on the 8th of August, at the age of seventy-one years. He was a member of the Michigan State Medical Society, of which he had been president, and was known for his interest in sanitary matters.

E. N. HAWN, M. D., OF INDIANAPOLIS.—Dr. Hawn died on the 14th of August, at the age of fifty years. At the time of his death he was the secretary of the State Board of Health, and had been Secretary of State.

Letters to the Editor.

ERYSIPELAS MIGRANS.

337 WEST NINETEENTH STREET, N. Y., September 7, 1883.

To the Editor of the New York Medical Journal:

SIR: Dr. H. F. Walker's remarks on erysipelas migrans, made before the New York Medical and Surgical Society, April 28, 1883, remind me of a somewhat similar case which came under my care some six years ago in England. It was that of a child between eight and nine months old. The erysipelas started in the right calf, and an abscess formed, which I opened; it then attacked the same thigh, shifted from that to the left leg, and thence to each arm in succession, and then returned to the spot whence it started, forming another abscess, which I also opened. One feature in the case was the little apparent suffering the child seemed to have during this time—a period of twelve days. The treatment adopted was: Linseed meal poultices, made in extract of poppies solution, applied to the parts attacked, and internally some compound rhubarb mixture—thrice daily. The child recovered, and has, so far, had no renewal of the attack—i. e., to the beginning of last year, when I left England. I am yours, etc.,

JOHN C. WHITE, L. R. C. P. Edin.

THE RUBBER COIL AND OTHER MATTERS.

JUNCTION, PULASKI COUNTY, ILL., September 7, 1883.

To the Editor of the New York Medical Journal:

SIR: Having found it very difficult to apply ice or ice-water with sufficient regularity to keep down the heat in lacerated wounds, and having seen in your paper reference to the "ice coil," I wish to ask if there is in your city some well-approved method of applying cold in such cases. Also to report the case of a man, some sixty-eight or seventy years of age, who last year was treated for malarial fever, who, on partial recovery, was affected with pain in the arm, which his physician regarded as rheumatism, but found no means to alleviate.

Though otherwise in moderate health, walking and riding about his farm, he has not had his hand to his face in a twelve-month.

I understand some fifty grains of quinine were given in a day during the fever, and that his physician proposed to give chloroform, and forcibly bend the arm.

There are, too, in this country a number of persons who

never sleep, notwithstanding pounds of bromides, chloral, and cannabis indica, and whose constant cry is blessings on the man's head who *for us* would "invent sleep," and this, too, after Dr. Sell, of your city, has written so much about the "oat cure" for inebriates of various kinds. Can it be possible that virtue attaches to such things?

In my own person I received a poisoned wound many years ago, which resulted in inflammation of the veins of the leg, and paralysis. The superficial veins of that side have remained varicose, and two years ago I had rheumatism of that knee, with extreme pain in the popliteal space, apparently of the returning vessels. Epispaties, repeated in succession and continued for days, alleviated the suffering, which otherwise would have been unbearable, and set me on my feet again.

Lately a horse kicked me and broke the fibula, and made an external wound, which has about closed, but which was accompanied by an intensity of pain and heat unparalleled in my experience. It was here I found the use of ice so inconvenient, but yet so essential to comfort.

I am waiting the union of the broken bone, and find my physicians divided about the propriety of my taking iodide of potash, there being numerous little sores on the limb, and some swelling of the glands in the groin and in the axilla, as was true in the first case of the poisoned wound.

If your polyclinics meet with any more knotty cases than this, they deserve our sympathy. Respectfully,

JAMES H. CRAIN, M. D.

** We think our correspondent would find the coil a satisfactory means of applying either heat or cold. Possibly some of our readers may be able to advise him in regard to his present troubles.

Proceedings of Societies.

AMERICAN GYNÆCOLOGICAL SOCIETY.

THE eighth annual meeting was held in the hall of the College of Physicians, in Philadelphia, Tuesday, Wednesday, and Thursday, September 18, 19, and 20, 1883, the President, Dr. GILMAN KIMBALL, of Lowell, Mass., in the chair.

First Day—Morning Session.

The meeting was called to order at 10.30 A. M.

The following-named Fellows were present during the day: Dr. GILMAN KIMBALL, of Lowell, Mass.; Dr. FORDYCE BARKER, of New York; Dr. ROBERT BATTEY, of Rome, Ga.; Dr. B. B. BROWNE, of Baltimore; Dr. WILLIAM H. BYFORD, of Chicago; Dr. JOHN BYRNE, of Brooklyn; Dr. HENRY F. CAMPBELL, of Augusta, Ga.; Dr. JAMES R. CHADWICK, of Boston; Dr. EDWARD L. DUER, of Philadelphia; Dr. THOMAS ADDIS EMMET, Dr. FRANK P. FOSTER, and Dr. WALTER R. GILLETTE, of New York; Dr. WILLIAM GOODELL, of Philadelphia; Dr. WILLIAM T. HOWARD, of Baltimore; Dr. JAMES V. INGHAM, of Philadelphia; Dr. A. REEVES JACKSON, of Chicago; Dr. JOSEPH TABER JOHNSON, of Washington; Dr. WILLIAM T. LUSK, of New York; Dr. GEORGE H. LYMAN, of Boston; Dr. MATTHEW D. MANN, of Buffalo; Dr. C. D. PALMER, of Cincinnati; Dr. THEOPHILUS PARVIN, of Philadelphia; Dr. THADDEUS A. REAMY, of Cincinnati; Dr. JOHN C. REEVES, of Dayton, O.; Dr. JOHN P. REYNOLDS, of Boston; Dr. ALBERT H. SMITH, of Philadelphia; Dr. R. STANSBURY SUTTON, of Pittsburg; Dr. ELY VAN DE WARKER, of Syracuse; Dr. H. P. C. WILSON, of Baltimore; and Dr. E. WILSON, of Philadelphia.

THE ADDRESS OF WELCOME was read by Dr. EDWARD L. DUER, of Philadelphia, who dwelt briefly upon the scientific importance of the annual meetings, but emphasized also the value of the social element.

INVITED GUESTS.—On recommendation of the Council, the following-named gentlemen were invited to attend the meeting as guests of the society: Dr. ALFRED STILLÉ, president of the College of Physicians of Philadelphia; Dr. WILLIAM M. WELCH, president of the Philadelphia County Medical Society; Dr. RICHARD A. CLEEMAN, president of the Obstetrical Society of Philadelphia; Dr. JAMES TYSON, president of the Pathological Society of Philadelphia; Dr. ROBERT P. HARRIS, of Philadelphia; and Dr. I. R. PAGE and Dr. ROBERT T. WILSON, of Baltimore.

SUPERINVOLUTION OF THE UTERUS.—Dr. JOSEPH TABER JOHNSON, of Washington, read a paper with this title, in which, after summarizing the writings of Sir J. Y. Simpson and other authors upon the subject, he embodied notes of four cases that he had met with in his own experience. Care should be taken not to confound such cases with those of atresia of the uterine canal. General invalidism was not a necessary result of the lesion, as was shown in one of the cases narrated, in which the patient appeared to be in blooming health. In cases in which there was impairment of the general health, the use of galvanism, ergot, strychnine, and various tonics would correct that condition, but the problem was, to restore the uterine functions to their normal condition, and especially to overcome sterility. In this attempt the author's experience had not been encouraging. In one instance phenomena resembling the early signs of pregnancy followed, but they proved illusory, and impregnation was found not to have taken place. Dr. JOHNSON was not inclined to agree with Dr. Walter Coles, of St. Louis, in considering the lesion to be properly one of post-partum atrophy, rather than of superinvolution. In the treatment, galvanic stem pessaries were recommended by many authors, but it was admitted in general that restoration of the organ to its natural condition could not be accomplished, in marked cases, by this or any other measure.

Dr. FORDYCE BARKER, of New York, remarked, in regard to the term "superinvolution," that he thought it might properly be applied to excessive involution after enlargement of the uterus from any cause, as from fibrous tumors, and need not be limited to the hypertrophy due to pregnancy. It was difficult to estimate the frequency of its occurrence, but he saw from one to three cases every year—mostly in consultation. In deciding whether or not, in any given case, there was a chance of producing improvement by treatment, he had been in the habit of guiding himself by the state of the ovaries in regard to the function of ovulation. If there were well-marked signs of ovulation, the prognosis was reasonably good. The speaker related cases illustrating this statement.

Dr. A. REEVES JACKSON, of Chicago, had seen but a single case, and that of doubtful diagnosis, and had been surprised to find now that the occurrence of the condition was considered so common. In his case there was stenosis of the uterine canal. The use of a galvanic stem pessary for several months was productive of no benefit. The speaker was inclined to regard Dr. Barker's suggestion as to the prognosis as of very great practical importance.

Dr. ELY VAN DE WARKER, of Syracuse, N. Y., called attention to the frequency of superinvolution limited to the cervix, due, in his experience, to laceration of the cervix, and generally confined to the posterior lip. Perhaps the lesion was due to cicatricial contraction.

Dr. H. P. C. WILSON, of Baltimore, had rarely met with superinvolution following gestation—not more than two or three

times in his whole practice. Dr. Barker's view as to prognosis commended itself to him, and had been borne out in his experience.

Dr. ROBERT BATTEY, of Rome, Ga., spoke of superinvolution as a very common result of oöphorectomy, often very marked in degree. Lack of proper ovulation was, he thought, the cause of the trouble in the class of cases referred to by the reader of the paper. He could not agree with Mr. Lawson Tait in regarding the ovarian function as of little governing importance in the physiology of menstruation. In regard to treatment, he had found electricity, passed from the sacral region through to the iliac region or the vagina, the most beneficial agent, and with its use he usually combined dilatation of the uterine canal with tents.

Dr. WILLIAM H. BYFORD, of Chicago, was inclined to regard superinvolution as one of the stages of atrophy. We should distinguish, too, between diminution of the size of the uterus alone and such reduction associated with other atrophic or senile changes in the pelvic organs, especially the ovaries. In simple uterine cases, stimulation by some foreign body might be productive of benefit.

Dr. HENRY F. CAMPBELL, of Augusta, Ga., did not think the condition was necessarily due either to the discontinuance of ovulation or to atresia. He had known it to result from over-distension of the uterus due to dropsy of the amnion, of which he related an interesting example. This result, he thought, was due to injury to the muscular structure, as happened to the bladder in cases of over-distension.

Dr. JOHNSON closed the discussion by expressing his agreement in the view as to prognosis given by Dr. Barker.

THE IMPORTANCE OF CLEANLINESS IN SURGICAL OPERATIONS was the title of the next paper, by Dr. R. STANSBURY SUTTON, of Pittsburg, Pa. The author drew a striking picture of the effects of surgical methods in vogue prior to the past twenty-five years in thwarting the efforts of nature in the repair of injuries. The ancients governed themselves by the theory that everything bad came from within; consequently, purgation of one sort and another was thought to be of the first necessity. We, on the other hand, regarded the malign influences acting upon wounds as derived from without, and took all possible pains to exclude germs and to maintain scrupulous cleanliness. Reviewing the chief modifications of the Listerian method of treating wounds, and according full credit to the method, the author thought it abundantly established, by the experience of Dr. Keith, Mr. Tait, and Mr. Bantock, that, in some of its features at least, it was better to modify it in abdominal surgery. Those who found great advantages in Listerism were those whose practice before they had adopted it was not characterized by the cleanliness that was one of its cardinal points; those who regarded it as of no assistance were those who already paid so much attention to cleanliness that they did not stand in need of the improvement it involved. A specific dressing was not needed in all cases; cleanliness, however, should always be secured. The reader then gave detailed directions for the maintenance of cleanliness.

At the suggestion of Dr. Barker, Dr. S. D. GROSS, of Philadelphia, was invited to open the discussion, but declined to do so.

Dr. THOMAS ADDIS EMMET, of New York, was fully aware of the necessity of cleanliness. He placed more reliance on soap and water than on any germicide.

Dr. WILLIAM T. LUSK, of New York, thought Dr. Sutton's directions as to cleanliness would satisfy the most ardent supporter of Listerism. He could not admit that the spray was so useless or so dangerous as it was getting to be common to represent it. In operations upon parts reached through the vagina, the advantages to be derived from preliminary disinfection of

the vagina were most decided. Some years ago the speaker did the first successful ovariectomy done in Bellevue Hospital—some years ago, and in a surgical ward—relying on Listerism. In this "tainted hospital" he still performed ovariectomy without hesitation, and with good results, thanks to Listerism.

Dr. H. P. C. WILSON coincided with Dr. Lusk's views in regard to Listerism and to the spray. It was somewhat disingenuous, he thought, for the great ovariectomists to decry Listerism, while daily using all of Mr. Lister's precautions, barring the spray.

Dr. CAMPBELL was not aware that his operations had resulted any better since he had adopted Listerism than before. Even cleanliness he regarded as overrated.

Dr. SUTTON could not admit that the operators he had cited were in the habit of resorting to Listerism, all but the spray, for no specific germicide was used, but cleanliness only. Whatever good was to be attributed to the spray was, he believed, due to its wetting the germs, thus causing them to fall to the floor, rather than to its killing them; and no doubt pure water would accomplish the same purpose, whether in the form of spray, or delivered from a sprinkling-pot, or thrown on the floor with a broom.

Afternoon Session.

On recommendation of the Council, the following-named gentlemen were added to the number of invited guests: Dr. SAMUEL D. GROSS, of Philadelphia; Dr. R. B. MAURY, of Memphis, Tenn.; Dr. WILLIAM E. MOSELEY and Dr. WILLIAM P. CHUNN, of Baltimore.

HOT WATER IN SECONDARY HÆMORRHAGE AFTER PELVIC OPERATIONS.—Dr. ALBERT H. SMITH, in a paper with this title, spoke of the prominence that Dr. Emmet's teaching had given to the use of hot water as a hæmostatic, Dr. Emmet having, in turn, credited the late Dr. Pitcher, of Detroit, with originality in the matter. Ever since Dr. Emmet's first publication on the subject, Dr. Smith had made use of the measure in a wide range of cases, and with the most satisfactory results. Indeed, it had become so much a matter of routine that he would not have thought of making it the subject of a paper but for the fact that he had reason to believe that in some quarters it was not yet appreciated. His attention had recently been directed to the fact by a lecture given by Dr. Skene, of Brooklyn (see this journal for July 14, 1883, p. 29), in which mention was made of cases of secondary hæmorrhage, after operations, managed by manipulative interference which imperiled the full success of the operative procedures. Cases were related illustrating the efficiency of hot water under such circumstances.

Dr. THADDEUS A. REAMY, of Cincinnati, corroborated Dr. Smith's views, and stated that for many years he had had hot water poured on the perinæum during the operation for laceration, instead of using sponges.

Dr. JAMES R. CHADWICK, of Boston, and Dr. WILLIAM GOOD-ELL, of Philadelphia, coincided in Dr. Smith's views.

Dr. H. P. C. WILSON would emphasize the advantage of hot water in post-partum hæmorrhage. He also mentioned a striking instance of its beneficial action in a case of profuse hæmorrhage during vaginal oöphorectomy.

Dr. CAMPBELL preferred to depend on diluted tincture of iodine as a hæmostatic, as recommended by the late Dr. Trask, but did not doubt the efficacy of hot water.

Dr. MATTHEW D. MANN, of Buffalo, had not found the use of hot water always successful. He had never had occasion to use it in secondary hæmorrhage; but, in a case of primary hæmorrhage during the removal of a cancerous cervix, hot water proved of no avail. In that case, vinegar also failed, likewise the actual cautery and a firm iron tampon, and death resulted very speedily. An artery had been divided.

Dr. GOODELL thought nothing could be expected of hot water or any other hæmostatic in such a case as Dr. Mann's, but, in cases of oozing, hot water had some advantages over other hæmostatics, for it operated on tissues beyond those with which it came in contact. Hot vinegar had the advantages of hot water, and also of its own specific action.

Dr. BARKER called attention to the slow action of hot water in some cases where the prompt arrest of hæmorrhage was absolutely demanded, and to the delay often met with in obtaining it.

Dr. BYFORD concurred in the views expressed by Dr. Smith.

Dr. SMITH was gratified at the preponderance of experience of the satisfactory action of hot water. In cases where death was impending, he thought it essential to elevate the hips, so as to carry more blood to the brain, and thus give the styptic an opportunity to act. No therapeutic measure would invariably operate to our satisfaction. He thought hot water and a Davidson's syringe were reasonably apt to be at hand under the circumstances to which his paper referred.

SOME POINTS CONNECTED WITH THE SUBJECT OF DYSMENORRŒA was the title of a paper by Dr. C. D. PALMER, of Cincinnati, in which the mechanical theory was characterized as plausible and natural, and was stated to have received a great impetus from the writings of Sir J. Y. Simpson and Dr. Marion Sims. The theory had continued to be questioned, however, and, although generally still accepted, and, although doubtless applicable in a certain number of cases, it was questionable if it could count for much in the general ætiology of dysmenorrhœa. The plausibility of the theory was strengthened by the temporary benefit so commonly produced by dilatation and other operative procedures calculated to relieve stenosis. There were several reasons why, the speaker thought, the theory should not be held to cover the general run of cases—chiefly included in the proposition that the pain was not proportionate in intensity to the amount of obstruction present, and that the most intense pain was often present without any obstruction whatever, while in cases of marked narrowing or sharp flexure of the uterine canal there was frequently not the slightest pain. On the whole, the obstruction theory could not be regarded as established. In many cases there was a state of the endometrium that might be called neuralgia—a condition that made it exceedingly sensitive on the passage of a sound, and that was aggravated by the congestion incident to menstruation, also by the contact of clots, etc. In a flexed uterus, hampered by the mere fact of the deformity, the tissue of the organ could not yield and swell during the menstrual congestion as it ought to do, so that the pain was the result of compression. In general, the affection was a neurosis, due to defects of the system at large, which latter might be an error of nutrition or an altered action of the nervous system.

In regard to treatment, in young women local measures should be omitted, at least at first. It was improper to regard every case of dysmenorrhœa as calling for such treatment. To correct derangements of the system was our first duty. Local treatment might prove to be needed in the end. Iron would do much good in cases of scanty flow, and arsenic where the flow was profuse or too frequent. Electricity was uncertain in its effects. Sometimes corrosive sublimate and iodide of potassium, in small doses, continued for months, the author had often found useful. The same was true of moderate doses of tincture of cimicifuga racemosa and tincture of pulsatilla during the periods. Opiates were to be given only with the greatest caution, and only where absolutely required. Dilatation of the uterine canal should not be resorted to until medication had failed; and this measure did not really operate by dilatation, but partly by blunting the sensibility, and partly by rupturing

circular muscular fibers. It was best done with graduated bougies, or with two-bladed dilators. Incision of the cervix, the author thought, had been much overrated, and resorted to far too often. Its field had now, with the lapse of time, been considerably limited.

Dr. CHADWICK was very much of Dr. Palmer's way of thinking on the subject, and for some years past he had been gradually giving up the operation of incision, now limiting the latter to cases of marked stenosis of the os externum. The pain of dysmenorrhœa, in obstructive cases, was, he thought, generally due to spasmodic contraction of the uterus or of the Fallopian tubes, analogous to the rectal and vesical tenesmus caused by fissure of the anus or prostatic obstruction, and reflex in its mechanism. He had treated several patients satisfactorily by inducing slight bromism before the flow and by giving coea and carbonate of ammonium during the flow.

Dr. BARKER thought Dr. Palmer had expressed, better than had been expressed before, views with which in the main he was thoroughly in accord. Mechanical obstruction, he believed, was but rarely the real cause of dysmenorrhœa, but he supposed it was sometimes. It was very important to distinguish between uterine and ovarian dysmenorrhœa. In cases where the pain lasted only up to the beginning of the flow, he believed the pain was due to the effort of the uterus to relieve its own congestion by the occurrence of hæmorrhage. This form of the disease was met with both in plethoric and in anæmic women. Of ferruginous preparations, he preferred the lactate, from its being the most readily assimilable—three to five grains three times a day, with chlorate of potassium. Where the uterus was really at fault, he had had more satisfaction from the use of apiol than from that of any other remedy—two or three capsules, after each meal, beginning two days before the flow.

In cases where the pain did not begin until the flow had continued two or three days, there was excess of ovarian excitement. In such cases the bromides were very efficient, especially the bromide of sodium, ten to fifteen grains three times a day (at the middle of the forenoon, the middle of the afternoon, and bedtime), beginning several days before the flow.

Second Day—Morning Session.

The meeting was called to order at 10.20 A. M. by the President, who proceeded to deliver the annual address.

In addition to the Fellows present at the first day's session, the following-named gentlemen were in attendance: Dr. W. H. BAKER, of Boston; Dr. SAMUEL C. BUSEY, of Washington; Dr. CHARLES CARROLL LEE and Dr. HENRY J. GARRIGUES, of New York.

THE PRESIDENT'S ADDRESS; A BIOGRAPHICAL SKETCH OF DR. NATHAN SMITH, FOUNDER OF THE DARTMOUTH MEDICAL COLLEGE.—The address alluded to the early history of ovariectomy, Dr. Nathan Smith having been the second to perform the operation, doing it independently of any knowledge of what had been done by Dr. Ephraim McDowell. The President then traced the early career of Dr. Nathan Smith, followed by a story of his arduous work as a teacher of medicine and of his remarkable achievements as an organizer of medical colleges. The address closed with the prediction that a monument would yet be set up in New Hampshire recounting the deeds of Dr. Nathan Smith.

Dr. SAMUEL D. GROSS, of Philadelphia, present by invitation, was not aware that Dr. Smith had not known of Dr. McDowell's ovariectomy at the time of his first operation. He added that Dr. Nathan Smith's greatest achievement had not been spoken of—that of begetting such a son as Dr. Nathan R. Smith, of Baltimore.

A RARE FORM OF ABDOMINAL TUMOR—THREE CASES.—Dr.

THADDEUS A. REAMY, of Cincinnati, read a paper recounting three cases of hæmatoma of the abdomen, and showed a specimen from one of the cases. In one of the cases there was a sarcomatous growth. In the two other cases puncture was followed by recovery.

Dr. CHARLES CARROLL LEE, of New York, concurred with Dr. Reamy as to the extreme rarity of cysts of the omentum.

Dr. SUTTON thought that as a rule a sarcoma of the omentum could not be distinguished from a carcinoma of the same structure, except by opening the abdomen, although perhaps by the method of exclusion the situation of a growth might be ascertained with reasonable probability to be in the omentum. Given a fluctuating tumor thought to be situated in the omentum, he regarded it as dangerous to puncture it with a trocar or with an aspirator needle. In all such cases exploratory laparotomy should be performed.

Dr. CAMPBELL thought that tapping sometimes had to be done in such cases as a palliative measure, under circumstances where laparotomy was not to be thought of.

Dr. REAMY argued in support of the practice of puncturing cysts under such circumstances, considering it free from certain dangers attaching to a like method of dealing with ovarian cysts; and, in fact, the two patients he had tapped had both recovered.

A paper, by Dr. EDWARD W. JENKS, of Chicago, on "A New Method of Operating for Fistula in Ano" was read by title, the author being absent.

CONGENITAL FISSURE OF THE FEMALE URETHRA WITH EXTROPHY OF THE BLADDER.—Dr. CAMPBELL read a paper embodying an account of a case of this sort, in which, he thought, a plastic operation would be advisable at the time of puberty, the patient being now a young child.

Dr. B. B. BROWNE, of Baltimore, related a case somewhat similar.

Dr. MANN related a case of laceration of the perinæum in a young child, in which he advised the operation at the time. It was done without difficulty, and the result was perfect. Arguing by analogy, he thought the operation had better be done early, so as to favor a more natural growth of the parts.

Dr. CAMPBELL thought that, in such a case as he had related, the scarcity of tissue was so great as to interfere with the performance of a plastic operation.

A STUDY OF THE ÆTIOLOGY OF PERINEAL LACERATION, WITH A NEW METHOD FOR ITS PROPER REPAIR.—Dr. THOMAS ADDIS EMMET, of New York, read a paper with this title, a notable feature of which was an expression of the author's belief that in ordinary cases of laceration of the perinæum no symptoms were produced by the injury, after it had once healed, except those of a reflex nature. In many cases of complete rupture, the pelvic organs would still be found in their normal situation. Moreover, the ordinary forms of operation for closing perineal laceration rarely, if ever, overcame the symptoms for which they were undertaken. The explanation was, that it was not a solution of continuity affecting the muscular structure of the perinæum that constituted the source of symptoms, nor the restoration of that structure that would accomplish the cure of such symptoms; it was the concomitant injury of the fascial structures of the pelvis that was of consequence, and it was to the repair of those tissues that our attention should be directed. Frequently the pelvic fascia was overstretched in difficult labor, especially if the perinæum was "supported." In the operation for restoring the perinæum, it was useless to carry the denudation so far externally as was often done. It should be limited to the true ostium vaginae, and the perinæum should be further strengthened by bringing forward a transverse fold of the posterior wall of the vagina, even if there was no proctocoele. The

mistake should be avoided, however, of taking up too much of the posterior wall, for that would give rise to an amount of tension that would make it necessary to remove the sutures to prevent their cutting out. The author had used perforated shot with sutures of silk-worm gut, and had been pleased with the efficiency of this device. During the past year all his operations had been done by the method described. [Here, by request, Dr. Emmet drew diagrams on the blackboard illustrating his operation, and the consideration of his paper took the form of questions and answers tending to explain the steps in the operation and their purpose. The features of the operation were, in brief, as follows: Two transverse crescentic spaces were to be denuded—an outer crescent with the concavity looking backward, and an inner crescent with the concavity looking forward. To establish the situation of these crescents, three tenacula were to be employed. With two of these instruments the open mouth of the vagina was to be brought together by inserting the points at the level of the upper limit of the remains of the hymen, one on each side. The points thus seized would mark the extremities of the anterior crescent, and while they were held together with the instruments the third tenaculum was to be inserted in the posterior vaginal wall, in the median line, at a point that could be drawn forward to meet the two former without giving rise to undue tension. This point would mark the center of the posterior crescent. The denudation having been effected, the two crescentic denuded patches were to be stitched together. This would have the effect of drawing the perineal tissues upward, so that the vertical rent in the median line would be much shortened, and could now be closed with a few sutures. The latter step, however, was not essential.]

Afternoon Session.

CONTINUATION OF THE DISCUSSION ON DR. EMMET'S PAPER.—Dr. EMMET gave a brief *résumé* of the paper, emphasizing his disbelief in the doctrine of a substantial perineal body as a supporting body. His operation was a simplification, enabling operators to effect repair who might be incapable of doing so by the ordinary operations.

Dr. REAMY could not avoid the conclusion that the operation could not well be substituted in general for the operation Dr. Emmet had previously inculcated. He doubted if there would ever be such shrinkage of the undenuded area between the two crescents as to do away with the danger of rupture occurring again at a subsequent confinement; and he doubted if the operation could do more than get rid of redundant tissue in the posterior vaginal wall.

Dr. FRANK P. FOSTER, of New York, expressed himself as even more radical in the view that the perinæum had physiologically no such office to perform as to sustain the parts above it, and therefore its restoration was not demanded as a means of support. In abnormal conditions of the parts situated above it, it might and often did supplement their defects. Moreover, it had certain functions, not pertinent to this discussion, which called for its repair.

Dr. SUTTON dissented from Dr. Emmet's view as to the non-necessity of repairing lacerations of the perinæum apart from injury to other structures, and appealed to common observation of the ills with which women with rupture of the perinæum suffered, and which were commonly cured by closing the laceration. He traced a similarity between Dr. Emmet's new operation and the one practiced by Hegar.

Dr. EMMET again denied the supporting office of the so-called perineal body. He thought his paper had not been very clearly understood. In reality, he was not much at variance with the other speakers, as would be seen when the paper was read carefully.

THE MANAGEMENT OF ACCIDENTAL PUNCTURE AND OTHER INJURIES OF THE GRAVID UTERUS AS A COMPLICATION OF LAPAROTOMY.—Dr. LEE read a paper with this title, in which he expressed his belief that, in addition to the few cases on record, many more must have occurred. He then epitomized the scanty casuistics of the subject—seven cases, including one, already reported, in his own practice. He dissented from Sir Spencer Wells's advice to remove the uterus under such circumstances, and expressed his views in the following conclusions: 1. The pregnant womb may be punctured or otherwise wounded during laparotomy without necessarily causing abortion. 2. Miscarriage seems, both *a priori* and from clinical evidence, to depend upon injury of the uterine contents, not of the womb itself, however severe. 3. If the former has certainly occurred, Cæsarean section is indicated, and should be performed promptly. In this case the utmost care must be taken subsequently to secure thorough drainage from the uterine cavity. 4. If the uterine walls alone are injured, the wound is to be treated on general principles. If there is a deep puncture or incision, it must be sutured with the minutest care, with exact coaptation of the edges. For this purpose fine silk sutures, rendered antiseptic, are the best. If there is a nick or superficial puncture, it must not be ligated, for ligatures cut through uterine tissue quickly. If the wound is too small to require sutures, the bleeding points must be touched lightly with Paquelin's cautery until oozing has ceased. Good surgery and the dictates of humanity alike demand that, under such circumstances, a chance of survival should be given the child as well as the mother.

Dr. H. P. C. WILSON had had some experience of the sort alluded to by Dr. Lee. In a case of pregnancy of four months duration he had performed ovariectomy, and found a firm pedicle attached to the uterus. On dividing it there was considerable oozing from the uterine tissue, which had been encroached upon slightly by the scissors. It was checked with Monsel's solution, and the patient did well, but, three or four weeks afterward, intense pains set in and lasted for about ten days, when an abscess broke and abortion took place. He did not doubt that the abortion was due to the abscess.

Dr. HENRY J. GARRIGUES, of New York, had had the good fortune to witness Dr. Lee's operation, and it had been his impression at the time that the trocar did not open the amniotic sac.

Dr. WILLIAM H. BYFORD, of Chicago, thought the profession indebted to Dr. Lee for the paper he had read. He called attention to the fact that it was only in Dr. Lee's own case that pregnancy was suspected beforehand. He himself had had a case, in which also he had failed to make out the existence of pregnancy by omitting to examine for it. He thought that Dr. Lee's rule as to stitching up the wound where the ovum was not injured should not be made absolute, for in his case, one of advanced pregnancy, the tractile action of the muscular tissue converted the puncture at once into a gaping orifice, and in such a case sutures would not hold. He thought that under such circumstances, even if the ovum was not injured, the uterus should be emptied and the wound stitched up. In early pregnancy, however, he would follow Dr. Lee's rule.

Dr. LEE would in general avoid the use of Monsel's solution. He thought there was great force in the distinction brought forward by Dr. Byford.

IS EXTIRPATION OF THE CANCEROUS UTERUS A JUSTIFIABLE OPERATION?—This was the title of a paper read by Dr. A. REEVES JACKSON, of Chicago. Starting with the general postulate that the use of a remedial measure that usually failed to accomplish its object was not kept up by honest and humane men, especially when its employment involved manifest danger to life, and deducing, from a review of the history of hysterectomy for cancer, that this operation very commonly proved the

direct cause of speedy death, and that in other cases it scarcely did more for the patient than to render her last days somewhat more comfortable than they would otherwise have been, Dr. Jackson reached the conclusion that the operation was unjustifiable, whether done by the vaginal or by the abdominal method. The operation was incapable of such improvement as to make it anything else than too difficult and dangerous to be countenanced. Even when it did not destroy life, it might sometimes, by being really a partial procedure, stimulate and hasten the extension of the disease. The paper closed with a telling indictment of so-called "brilliant" surgery—operations that killed being termed brilliant.

Dr. VAN DE WARKER placed great reliance on the use of caustics, instead of operative measures, and he employed a saturated solution of chloride of zinc. He showed specimens of large sloughs cast off after the action of the caustic.

Dr. EMMET coincided fully with the views expressed in the paper. His experience had been limited to one case, which terminated unfavorably. In that case he had operated against his own conviction, as the operation was one he had always opposed. [This case will be found reported, in the proceedings of the New York Obstetrical Society, in this journal.] If the operation was to be done at all, it should be done by the vaginal method.

Dr. WILLIAM H. BAKER, of Boston, could not believe that operative measures were wholly useless, for in a number of instances he had operated for the removal of portions of the uterus for cancer, with the result of prolonging life for years. He described and figured his own method of operating, being a combination of Sims's and Schröder's operations. Dissecting the cervix loose from its attachments up to the level of the os internum, a cone-shaped piece was then removed, the apex reaching nearly or quite to the fundus. He had done this operation in thirty cases, and without a single death. Extirpation of the entire uterus, however, was advisable in extremely few cases, and those were mostly cases in which the disease began in the body of the organ, the cancer being of the glandular form, and both body and cervix were involved. He had never seen just such a case.

Dr. PALMER thought that the best that could be said for hysterectomy was that it might possibly be justifiable in a few instances, those, namely, of sarcoma starting in the body of the uterus.

Dr. SUTTON had operated in five cases, in all by Simon's method. He thought the abdominal method should never be adopted in cases in which it was possible to perform the vaginal operation.

Dr. JACKSON was not surprised to hear of the good results that had followed less dangerous operations in Dr. Baker's hands, and he doubted if either Dr. Baker or Dr. Sutton would ever meet with a case in which he would advise extirpation of the uterus.

Third Day—Morning Session.

ELECTION OF OFFICERS.—The following officers were elected for the ensuing year: *President*, ALBERT H. SMITH, M. D., of Philadelphia; *Vice-Presidents*, JAMES R. CHADWICK, M. D., of Boston; SAMUEL C. BUSEY, M. D., of Washington; *Secretary*, FRANK P. FOSTER, M. D., of New York; *Treasurer*, MATTHEW D. MANN, M. D., of Buffalo; *Other Members of the Council*, T. GAILLARD THOMAS, M. D., FORDYCE BARKER, M. D., of New York; THADDEUS A. REAMY, M. D., of Cincinnati; R. STANSBURY SUTTON, M. D., of Pittsburgh; *For Active Fellowship*, R. B. MAURY, M. D., of Memphis.

(To be concluded.)

OBSTETRICAL SOCIETY OF PHILADELPHIA.

A STATED meeting was held June 7, 1883, the President, R. A. CLEEMANN, M. D., in the chair.

INTERSTITIAL PREGNANCY.—Dr. F. C. SHEPPARD exhibited the uterus and appendages removed post mortem, and read the following report:

Through the courtesy of Dr. George S. Hull, of Chambersburg, Pa., I am enabled to present this evening the post-mortem specimens of one of the rarer forms of extra-uterine pregnancy. The history of the case is given in such a clear and complete form by Dr. Hull that I will read it in his own words. "(April 11, 1883.) A few days ago it fell to my lot as coroner to hold an inquest on a colored woman who had died suddenly. Vomiting followed by death, together with a history of family troubles, led her friends to suspect her husband of poisoning her.

"About 3 A. M., pains had set in in the left inguinal region, accompanied by severe vomiting. I could not learn whether the pain preceded the vomiting, or *vice versa*. A physician was sent for; he did not go, but sent three quarter grain morphine powders. She took one every hour, seemed easier, and the vomiting ceased. At noon, becoming very weak, the doctor was again sent for, responded in person, and found the patient pulseless at the radials; he ascertained that she had been constipated for about a week, and made a diagnosis of obstruction of the bowels; he gave five compound cathartic pills, and ordered an enema. In an hour the patient was dead.

"Autopsy.—Peritonæum inflamed (recent—no pus), stomach empty, save the pills, which were liquefied, intestines normal. About two quarts of clotted blood were found in the abdominal cavity. The womb was ruptured, a small circular rent in the fundus about the left cornu.

"The uterus was removed and the rent enlarged; a fœtus of about three months with membranes entire was found. The placenta seemed attached at the point of rupture.

"The pregnancy seemed to be interstitial, the tube being involved. The lower half or two thirds of the uterus was much hypertrophied and contained two or three teaspoonfuls of mucus, which could be pressed out at the os uteri. There was no communication between the pus-cavity and the cavity containing the fœtus. The uterus was not adherent to the other organs."

A sketch by Dr. Hull shows the uterus inclined to the right side, the fœtal sac occupying very nearly the normal position of the fundus, and the point of rupture a little to the left of the line of the umbilicus.

"It occurred to my mind that the rupture was spontaneous, causing the vomiting and pain of the night; however, the woman had eaten of sauerkraut for supper, and it might have caused the vomiting, and that in turn the rupture. The morphine allayed the symptoms for a time, but the hæmorrhage was slowly going on, and peritonitis setting in; the former predominating, death took place from loss of blood. She was the mother of one child, and was, to all appearances, in good health up to the time of the accident."

An examination of this very interesting specimen shows an enlarged wound with a dilated cavity, the walls of which are hypertrophied to a thickness of seven eighths of an inch; lining this cavity is a structure which appears to be a true uterine decidua: the os is small, with an irregular stellate outline, and is perfectly patulous; the cervix is partially absorbed. The right ovary is small and flattened; the left of about normal size. At the point of entrance of the left Fallopian tube is a large intra-mural cavity, which contained the fœtus; the outer wall of this cavity is exceedingly thinned, and presents ragged edges at the point where rupture took place; to the inner wall

are attached some remnants of the placenta; no communication can be detected between the fœtal cyst and the uterine cavity. The fœtus is apparently of from three to four months, and is presented with the membranes unbroken.

To cases of this class the terms interstitial, tubo-uterine, utero-interstitial, and parietal have been applied. Dr. Parry, in his work on "Extra-Uterine Pregnancy," classifies them under the head of "tubo-uterine, or those in which the germ is arrested in that portion of the tube which passes through the uterine." They are very rare. An analysis by Hecker (quoted by Parry) shows twenty-six cases out of two hundred and twenty-two, and Parry, in his analysis of five hundred cases of extra-uterine pregnancy, finds but thirty-one of the tubo-uterine variety, but two hundred and thirty of his cases are grouped under the general head of doubtful. Mr. Alban Doran ("Obstet. Trans.," vol. xxiv, 1882, p. 234) has been able to find but six specimens in all London, although he states that "we see a goodly array of the more frequent tubal form in almost every museum." I will not occupy your time this evening by referring to the question of pathology or of diagnosis, as both points cover the entire ground of extra-uterine pregnancy, and will be discussed in a future paper.

The proper treatment to adopt in these cases is, however, a point of great interest, and merits notice. A ruptured extra-uterine fœtal cyst may cause death instantaneously, as in the case of the English actress mentioned by Dr. Chabazian ("Obstet. Trans.," 1882, p. 157). "She was taking an ice in the Bois de Boulogne, she fell down suddenly, and she was dead." Poisoning being suspected, an autopsy was performed. No trace of poison was detected, but the ruptured pouch of an extra-uterine foetation showed the cause of death. In this case, of course, there was no time for surgical interference, but in many, as in the one reported this evening, an appreciable interval elapses between the first symptoms and the fatal issue. The diagnosis being made, what would be the proper course to pursue? Unquestionably, laparotomy. An exploratory incision would at once reveal the true condition of affairs, and the surgeon could either incise the cyst, turn out the contents, ligate the bleeding points, suture the edges to those of the abdominal wound, and establish drainage, or, if thought better, remove entire the uterus and its appendages. Either plan would offer a very fair prospect of recovery, while if left without surgical aid the patient would be doomed to inevitable death.

A number of points of interest present themselves in the study of this interesting case, but the limits of a paper of this character forbid us taking them up. I might merely call your attention to the large quantity of blood; Dr. Hull states, about two quarts exuded from a comparatively trifling rent. This fact has been repeatedly commented upon by other observers. Dr. Parry states that some of the most severe hæmorrhages occur when the orifices are very small, and cites a number of instances in which from several pounds to two and a half gallons of blood have been found in the abdominal cavity after rupture of extra-uterine cysts.

In conclusion, let me recall to your mind Dr. Hodge's case. His patient went to the eighth month, labor was brought on by dilating the os uteri, and the child delivered by rupturing the septum between the uterine cavity and the fœtal sac; the child was delivered by the natural passages. The child lived two hours, and the mother made a complete recovery.

Dr. B. F. BAEER had examined the specimens, and felt a doubt of its having been of the usual form of uterine tubo-gestation. That form was the rarest, and was considered the least dangerous because not so liable to rupture in consequence of having the muscular tissue of the uterine wall to strengthen it. In Dr. Hodge's case, the septum of uterine tissue between the uterine

cavity and the foetal sac was so thin that it could be scratched through with the finger. As the case reported by Dr. Sheppard terminated by rupture about the third or fourth month, it resembled a tubal in that particular. The question of operative interference was very interesting. In this case, as ten hours elapsed between the accident and death, an operation would have been justifiable if the diagnosis could have been established.

Dr. ALFRED WHELEN remarked that Miss Neilson lived ten hours after the first shock of her illness, and the published report of the autopsy stated the cause of the death to have been rupture of varicose ovarian veins.

Dr. SHEPPARD, in closing the discussion, remarked that Dr. Parry classed all of this type of cases as tubo-uterine. The sac in this case was undoubtedly in the uterine wall, as the specimen showed. He had not been able to pass a bristle from the uterus into the Fallopian tube. As regarded the possibility of the spontaneous stopping of the hæmorrhage as a reason for postponing the operation, he would not consider it advisable to wait, for even when the laceration was very small, as in this case, the hæmorrhage might, and probably would, be excessive; this hæmorrhage was the cause of death in most, if not all, of the cases, and the only chance for the patient was in stopping the hæmorrhage and removing the already effused blood. If the diagnosis could be made, laparotomy was justifiable, and would be the only resort. In the report by the French physician to the Obstetrical Society, no name was given; the patient was simply mentioned as an English actress.

KNOTTED UMBILICAL CORD.—Dr. CLEEMANN exhibited for Dr. John A. Hunter an umbilical cord tied into a complete single knot. There was no difference in size of any portion of the cord, and there had been no interference with the nutrition of the foetus. Dr. Hunter had not been present at the birth of the child, but had come in soon afterward, and in tying the cord and removing the placenta he noticed the knot. In a case reported by Dr. W. F. Jenks to this society, a failure of the foetal heart was noticed by auscultation, the child died *in utero*, and the knot in the cord was suggested as a probable cause of the death of the foetus. Such a knot as was seen in Dr. Hunter's case might be formed during parturition if a loop of the cord was around the child's neck and it was loosened and the body allowed to pass through it in the process of extraction.

Dr. MONTGOMERY thought that such a knot, if existing *in utero*, might develop a murmur that could be discovered by auscultation.

ACUTE HYDRAMNIOS.—Dr. E. E. MONTGOMERY remarked that although dropsy of the amnion was a quite frequent condition, that above named was exceedingly rare. For this reason he felt that the following case was worthy of record: June 4, 1883, he saw Mrs. P., in consultation with Dr. Chase. She was pregnant for the fourth time. In the one preceding this she had miscarried. Her last menstruation occurred December 10, 1882. In her former pregnancies she had been quite small, carrying the foetus low down. This time the abdomen was larger than formerly at the same period, but she continued without any special discomfort until one week ago, when, without any assignable cause, the abdomen began rapidly to increase in size, and continued to do so. The increase was attended by pain, tenderness, difficulty in breathing, entire loss of sleep for three days, loss of appetite, and scanty flow of urine. She was obliged to maintain a sitting posture, as lying down greatly increased the difficulty of breathing. They examined the urine, but found it free from albumin. The abdomen was distended more than we should expect to find it at full term. The tumor projected well forward and upward, and was a little more prominent to the right. It was perfectly regular in outline.

The skin of the abdomen was smooth, tense, and glistening, and could not be pinched up over the tumor. It was quite tender to pressure. Short-waved fluctuation was distinct over the whole surface, percussion was dull, a slight tympanitic resonance could be determined in both inguinal regions. No part of the foetus could be distinguished by abdominal palpation. In fact, all the external signs were those of an ovarian tumor. They imagined they heard the heart-sounds, but so indistinctly as to be uncertain. She said she had felt the foetal movement for several days very slightly. *Per vaginam* the cervix was found dilated, the os open so as to admit two fingers to enter it. The vertex of a foetus was felt presenting, and, singularly, was but slightly movable.

Considering the rapid enlargement in a few days, the excessive discomfort of the woman, as well as the imperiled circulation and the extreme improbability of the woman or foetus surviving until the latter had reached a viable age, they concluded the best course was to induce premature labor, and, from the urgent need of relief, to cause it by rupturing the membranes. This he did, and on the evening of the same day a still-born foetus was extracted. The upper part of the abdomen still continued almost as large as before. Examination *per vaginam* revealed the membranes of a second child. The rupture of these was followed by a gush and discharge of an enormous quantity of water. The second foetus and the placenta were soon extracted. The latter was single with two cords. One cord appeared to have only a membranous attachment, but closer examination showed that it had been torn off from the base of the other cord. The quantity of liquor amnii was so great that it soaked through folded quilts, mattress, floor, and ceiling, and dripped upon the floor of the room below. The uterus contracted firmly and the patient was at once relieved. The children were both males, and well developed for the sixth month: the second child lived a few minutes.

The fixed position of a foetus in the os in these cases had been given by M'Clintock as a sure indication of a pleural pregnancy, but Dr. Montgomery confessed that this did not occur to him at the time, though he was unable to account for the anomaly. The existence of a single placenta in twin pregnancies was said always to be accompanied by children of like sex; this theory was here confirmed as far as was possible by one case. As to the cause of the condition, authorities greatly differ. Gervis, in "St. Thomas's Hospital Reports," brought the causes under three heads: 1. Cases due to inflammatory conditions of the amnion. 2. Cases where the decidua was found diseased and hypertrophied, but the amnion healthy. This would cause effusion into the amnion by transudation owing to disturbed circulation. In these cases the foetus suffered and might atrophy. 3. It might arise from some maternal blood dyscrasia of uncertain nature, but evidencing itself by the same condition recurring in successive pregnancies in the same patient. Puerperal albuminuria might be the cause, and came under this head. Simpson said disease of the placenta was likely to recur in the same individual. Savage asserted that an œdematous condition of the placenta was present in all cases of hydramnios. M'Clintock found a morbid condition of the placenta in every case. Mercier always attributed it to inflammation of the amnion. Others had ascribed it to obstruction of the fetal portal circulation, or in the cord, giving rise to transudation into the sac from the surface of the cord. Hydramnios greatly endangered the life of the foetus. Of forty-three cases collected by M'Clintock, in which children were born where this condition existed, twenty were still-born, sixteen of these had ceased to live for some days or weeks before labor, eleven of those born living died in a few days. Of thirty-three cases, four mothers died, showing a high maternal mortality.

In this patient the success of the treatment was greater than expected. As the distension had been so rapid, they feared loss of power in the walls of the uterus, and a consequent long first stage and liability to hæmorrhage. It became an important question to decide whether they were justified in undertaking so promptly the induction of premature labor, but they felt that the probability of the death of the fœtus and the danger to the mother certainly in this case justified the procedure.

THE EFFECT OF THE OPERATION FOR THE RESTORATION OF THE LACERATED CERVIX UTERI ON FERTILITY.—Dr. B. F. BAER read a supplement to a former paper of his on this subject. [See the journal for July 14th, p. 48.] He there expressed the conviction, based upon his own experience, that sterility did not follow as a result of the operation, as had been asserted, but because the pathological conditions which almost constantly existed with the laceration were frequently not relieved, and this applied especially to the old cases. He there made this statement: "The longer the time which has elapsed between the occurrence of the injury and its repair (pregnancy being absent during this time), the greater and more permanent will be the changes in and about the uterus, which almost necessarily result in a continuance of the sterility after the cervix has been restored"; and he also said that, if five years or more had expired between the occurrence of the injury and its repair, sterility would be likely to remain. In support of this, he reported the cases of twenty-seven patients, of which number thirteen had been sterile from six to sixteen years. Of this number not one had become pregnant since the operation; but, of the eight in whom pregnancy had occurred within two to five years previous to the operation, he reported four that had become pregnant, and he now added two more.

CASE V.—Mrs. X, aged thirty-two years, mother of three children, youngest three years of age, complained of severe metrorrhagia every three weeks, and profuse leucorrhœa in the intervals, together with a dull, aching pain in the lumbar region and pelvis, and a sharp spasmodic pain in the bladder, which caused an almost constant desire to micturate. She had lost weight, was anæmic and nervous, and had so many obscure aches and pains that the doctor took refuge in writing the words "general hyperæsthesia from nervous exhaustion." Physical examination showed the perinæum to be lacerated to the external sphincter-ani muscle, but not through it. The cervix uteri was torn bilaterally to the vaginal attachment, but not much hypertrophied. The body of the uterus was only slightly enlarged, but its cavity was relaxed and granular. On January 30, 1881, after four weeks' preparatory treatment, he operated on the cervix, and secured a good result. He was made anxious on the second day after the operation by a rise of the temperature to 102° F., which, however, subsided to the normal by the next day. This rise he ascribed to the use of the curette just before operating, which he now thought ought not to have been done. This was the only instance in which he had observed a perceptible increase of temperature after this operation. This patient objected so strongly to the use of the catheter that he allowed her to pass her urine spontaneously. Since union was perfect here, he allowed his next patient to do the same, with a like good result, and this had been his custom ever since. It was his purpose to restore the perinæum, but she was so much benefited that she refused to permit it, and returned to her home in Michigan. A communication received a few weeks since informed him that she was spontaneously delivered at term six months ago.

CASE VI.—Mrs. M. had had three children at term and one miscarriage, the latter two years previous to February, 1878, at which time she first consulted him. She complained of a drag-

ging pain in the back from the sacrum to the nape of the neck, with menorrhagia and leucorrhœa. The neck and body of the uterus were hypertrophied, soft, and tender, and the former was badly torn on both sides; the mucous membrane was everted and abraded; the sound entered four inches. February 17, 1880, he operated for the lacerated cervix; union was immediate. In his case-book he had noted, October 25, 1881: "This patient has been in excellent health since the operation: whereas I had pursued the ordinary local treatment at intervals during the two years before it, with only temporary improvement." She was now in the fifth month of gestation. This made seventy-five per cent. of pregnancies following the operation in the eight cases of this class.

A STATED meeting was held September 6, 1883, the President, R. A. CLEEMANN, M. D., in the chair.

FACE PRESENTATION WITH ECLAMPSIA.—Dr. WILLIAM T. TAYLOR read the report of a case, as follows: "Face presentations are somewhat rare. Dr. Churchill said, some years ago, in recording the statistics found, that in British practice they occurred once in 292 cases, in French practice once in 275 cases, and in German practice once in 130 cases. In my own practice I have met with about one dozen, and, as the last one was combined with eclampsia, I will report it to the society.

"During utero-gestation my patient enjoyed very good health, having no headache, no swollen limbs nor bloated features, no vertigo nor dimness of vision. There was no deficiency of urine, and therefore I did not examine it for albumin. Her appetite was fair, her bowels were regular, and she took a moderate degree of exercise; so that I had no reason to expect any trouble when labor began. On May 14, 1883, I was summoned, at 6 A. M., to visit Mrs. C. Haley, aged twenty-three years, a primipara, who was in the first stage of labor, having had a show since midnight. On examination, I found the os very slightly dilated, with the pains 'few and far between,' and the face of the child presenting, with the chin toward the sacrum. The nurse informed me that the patient had not slept during the night, and was very nervous and irritable. Her skin was moist, her pulse was normal, and she had urinated frequently. I gave her a mixture containing hydrate of chloral, bromide of potassium, and valerianate of ammonium, to compose her, and went home to my breakfast, intending to return in a few hours. At eight o'clock the husband came to my office and told me that his wife 'had had a fit, and could not keep the medicine down.' I arrived at the house at 8.30 A. M., and sent immediately for some powdered hydrate of chloral and an injection apparatus. The patient had had two convulsions, which were ushered in by complainings of her head, her face being very red, and her head drawn to one side, with the features much distorted. The first convulsion occurred when the nurse was about to give the first dose of the medicine. Directly after my arrival a third convulsion occurred, and lasted for a minute or more, her head being violently drawn to the right side, with jerking of her arms and legs. I dissolved one drachm of the hydrate of chloral in about four ounces of water, and threw it into the rectum. The fit yielded immediately. As she was unconscious, I had an excellent opportunity of examining her. The os was dilated to the size of a quarter of a dollar, and soft, so that it yielded gradually to the pressure of my fingers, when I discovered the face presentation, with the chin toward the left sacro-iliac junction. I endeavored to push the chin toward the breast, so as to bring down the occiput in the second position of Baudelocque. This I found somewhat difficult; but, as the os dilated under the pressure of my fingers, I reached the occiput, and, after several attempts, succeeded in bringing it down to a favorable position—the one aforesaid. My patient by this time was becoming rest-

less and uncontrollable, and, fearing another convulsion, I again gave her an injection of chloral, which quieted her. Having placed her on her back, and brought her to the edge of the bed, her limbs being supported by the nurse and another woman, the forceps was easily applied, and the head brought down below the inferior strait. I removed the instrument when the head pressed against the perineum, allowing nature to finish the delivery. The child, a boy, was still-born, the cord being pulseless. In fact, I was apprised of this while endeavoring to dilate the os with my fingers, for a significant tremor had passed through the body of the child, assuring me of its death. The placenta was removed quite easily.

"During all this time my patient was unconscious, and had no return of convulsion from the time I gave her the first injection of chloral. As her pulse was good and her respiration easy, I applied a binder, and, having placed her in a comfortable position, left her sleeping. On my return, at 5 P. M., she was restless and slightly feverish, but, after taking a few doses of chloral and valerian, she was quieted to sleep. On the next morning, May 15th, she was perfectly conscious; pulse 80, temperature 99° F., and respiration normal. She had urinated freely, and, with the exception of slight soreness over the abdomen, was very comfortable. She inquired for the babe, knowing from her condition that it had been born, but the preceding twenty-four hours were to her a perfect blank. From this time she had no further trouble, and soon recovered. This case certainly showed the beneficial effect of injections of hydrate of chloral in controlling puerperal convulsions when they are of a nervous form."

Dr. ALBERT H. SMITH remarked that face presentations and puerperal convulsions presented a large field for discussion. Dr. Taylor was very fortunate to be able to bring down the occiput and keep it down until the forceps could be applied. In this operation a man needed three hands—one to hold the head while the others manipulated the instrument. The mechanism of a primary face presentation, as reported in this case, was difficult to understand. It might occur secondarily from obliquity of the uterus and a sudden free gush of waters, causing a sudden engagement of the head before flexion could be secured. In such cases it was very difficult to secure and maintain flexion until the forceps could be applied. In the majority of cases of face presentation, even with the chin posteriorly, nature was best able to terminate the case satisfactorily. It was to this class that the aphorism "meddlesome midwifery is bad" was most applicable. The natural forces worked slowly, and the neck of the child became accustomed to the extreme extension which it had to undergo, while it was very bad to bring a sudden strain on the vertebræ and other tissues of the neck by too rapid forcing of the chin into violent extension by means of the forceps or otherwise. The consequence of the hasty proceeding was a still-born child. The only ground for interference was an alarming condition of the child's pulse. If the child's heart was beginning to fail, we must take the risk and give it the benefit of the chance. The child's head could not be born in a face presentation until the chin had engaged under the pubes. The old teaching was that the chin posterior could not be born; but he was very early undeceived on this point, one of his earliest cases having been of this character. He had sent for his preceptor to come and bring perforating instruments, but, while awaiting their arrival, nature proved equal to the task, rotation occurred spontaneously, and a living child was born.

Dr. B. F. BAER inquired if version by the feet would not be much preferable to waiting for nature to deliver in chin-posterior positions.

Dr. SMITH did not mean that we should never interfere in a case of this kind, but that a large majority, if left to nature,

would terminate spontaneously by anterior rotation of the chin, with safety to both mother and child. He would decidedly negative the proposition of version by the feet, because, the amniotic sac having been necessarily ruptured by previous efforts to bring down the vertex, the waters would have been completely evacuated, and the uterus would be in a condition of spasmodic contraction, so that an attempt to turn would involve great danger of rupture of the organ. The introduction of the hand always increased the risk of septic absorption—two terrible risks for the mother, while the child was exposed to all the dangers of head-last delivery. He would consider chin-posterior presentations natural labors, and would allow them to terminate spontaneously unless there was some complication demanding version.

Dr. J. G. ALLEN coincided with Dr. Smith in his conservative principles. The risks of version to the mother were great—too great to allow it to be performed for the sake of the child. The operation of version was not looked upon in so serious a light as it should be, under all circumstances. In some instances it might be very easy, and might terminate well, but in others, apparently similar in conditions, the results to the mothers were bad. He would not lose one mother to save ten children. He would never resort to version unless the labor was impossible under other measures. Even after it was skillfully performed the child was often still-born. The increased risk to the mother was followed by no corresponding gain in safety to the child.

Dr. R. P. HARRIS thought the ideas of Dr. Smith were the same as held by most eminent obstetricians, and agreed with their practice as expressed to him in private correspondence.

Dr. BAER was willing to be taught. The views expressed this evening did not harmonize with the teaching of even the present day in Philadelphia. He had been taught that version would be proper if the case was diagnosed early and the operation could be performed before the waters were evacuated, and it seemed to him that the rational thing under such circumstances would be to turn. It was entirely a new light to him to consider chin-posterior cases as easy, natural labors. He had been taught to look upon them as impossible of spontaneous completion, rotation never taking place, the forces in action not being great enough to compel it. His own recent experience had led him to doubt this dictum; with one blade of the forceps, used as a vectis, he had without difficulty secured anterior rotation. His idea of the impossibility of rotation under the circumstances had made him doubt the correctness of his diagnosis of the position, but the principles put forth this evening reassured him. Might the death of the child, causing relaxation, be the cause of the face presentation?

Dr. ALLEN did not expect others to accept his opinion, but in his denunciation of turning he alluded to the complete transposition of one extremity of the fetal ellipse for the other, and did not include the changing of one part of the head for another; but, in the first class, the poor chance of saving the child would not compensate for the increased danger to the mother.

Dr. SMITH did not consider the chin-posterior an easy natural labor. On the contrary, it was the most difficult of natural labors. The chin struck upon the posterior inclined planes and was rotated to an anterior position, in which it engaged under the arch of the pubes exactly as the vertex would. In multiparæ, nature was able to accomplish this result, but in primiparæ assistance in rotation might be required, and even traction might become necessary. In contrasting the dangers incident to version by the feet and those involved in trusting to nature in this condition when the waters had been discharged, as they necessarily had, in the attempts to bring down the vertex, which would be first tried, we must remember that the child would be tightly grasped by the uterus, and that it must be twisted upon

its long axis as well as turned to bring the nape of the neck under the arch of the pubes, and that this procedure would greatly enhance the danger to both mother and child.

Dr. TAYLOR, in closing the discussion, remarked that the death of the child occurred after it was fully engaged, and was not a factor in causing the face presentation. When he made his diagnosis of position, the head was high up, and, the child being small, he had no difficulty in bringing the vertex down.

W. H. H. GITHENS, M. D., *Secretary*.

MEDICAL SOCIETY OF THE COUNTY OF ERIE, N. Y.

A SPECIAL meeting was held in Buffalo, September 8, 1883, Dr. STORCK in the chair.

REPORT OF THE COMMITTEE ON LEGISLATION, EMBODYING A DRAFT OF "AN ACT TO ESTABLISH THE MEDICAL FACULTY OF THE UNIVERSITY OF THE STATE OF NEW YORK AND TO REGULATE THE LICENSING OF PRACTITIONERS OF PHYSIC AND SURGERY."—The object of calling a special meeting of the society was then stated to be the hearing of the report of the Committee on Legislation, and the chairman called upon the secretary of that committee, Dr. Hopkins, to read that report.

Dr. HOPKINS prefaced the reading of the bill by the following remarks:

"The University of the State of New York was intended by its founders to be the organic head of the educational system of the State. Its influence was to be exerted and its control exercised over the various institutions of learning by a direct supervision of their incorporation, and then by a continuous system of visitation and reports. The university was first incorporated in 1784, and its present authority is a law passed in 1787, which law is said to have been drawn by Alexander Hamilton, who was a member of the Assembly at that time. The control of the university is by its Board of Regents, which consists of four *ex-officio* and nineteen other members, chosen by the Legislature. The *ex-officio* members are the Governor, the Lieutenant-Governor, the Secretary of State, and the Superintendent of Public Instruction. The elected members must be citizens of the State, and must not be officers of any college or academy. The ninety-fifth report of the regents, for 1882, includes returns from thirty-six colleges, having an attendance of 9,923 students, and showing graduates for the year 1,644 in number. Besides this, the regents visit about 250 schools of academic grade and distribute to them a school fund of about \$40,000 a year.

"The uniform and intelligent development of the educational interests of the State has not altogether followed the lines laid down by the framers of the constitution of our university, in that the legislature has from time to time granted charters to colleges upon terms less likely to secure the permanent efficiency of such institutions than would the terms imposed by the regents, the policy of the regents having been to discourage the establishment of feeble and ill-endowed institutions and to foster and encourage those with ample endowments. Although occasional legislative acts have been at variance with the educational policy of the university and of the State, the great mass of legislation is quite in harmony with, and, in fact, has been shaped by that policy.

"As a member of the Committee on Legislation of the Medical Society of Erie County, the writer was led to look with some little care into the history of medical education in our State, and, as a result of such study, is of the opinion that the faults of our present time are in great measure due to the neglect on the part of the proper authorities to develop and carry into effect the profoundly wise and statesmanlike ideas of Hamilton and his associates, shown in the formation of our State univer-

sity. The bill which that committee is about to report to the county society is drawn with the view of attempting to turn the stream of medical education into the channel indicated by the early framers of our educational policy. This bill proposes the establishment of the Medical Faculty of the University of the State of New York, and further proposes to endow that faculty with the sole authority to grant licenses to practice physic and surgery in the State. In conversation with members of the committee, it was thought that it would not be without interest to the society to have a brief digest of this bill submitted for its consideration. This bill will probably be offered upon the authority and responsibility of our county society, and it is the hope of the committee that under such authority the co-operation of the medical profession of the State may be secured to urge its passage by the next legislature.

"As before remarked, the bill provides for one more step in carrying out the idea of a university, by providing for the medical faculty of such university, and will have the immediate result of separating the teaching and the licensing powers. Under its operation the faculties of the various medical colleges will teach, but that of the university only will license. Not only will the faculty of the university not teach, but no man will be eligible to a position upon that faculty who is connected with any teaching faculty. The divorce of the teaching and licensing powers is to be absolute and unconditional. This is in harmony with the plan of the university, which provides that no person officially connected with any college or academy shall be eligible to the position of regent.

"The bill provides that the Governor shall appoint this faculty, consisting of nine members, who shall be legally authorized practitioners of physic and surgery, and stipulates that none of them shall be connected with any medical school, and that, in such appointments, the several systems of medicine shall receive *pro rata* representation, and that no one can enter upon the practice of medicine in this State after November 1, 1884, without the license of this faculty. Appointments shall be made for three, four, and five years; after the first all shall be made for the long term. This faculty is made the highest medical body in the State, and is to have the oversight of all medical societies and institutions, and may be appealed to by all such societies upon any question at issue in the same concerning any subject upon which such society is authorized to make by-laws, and is expected to so influence such societies that they may more efficiently carry out the object for which they were established. The proper officer may administer an oath, and the faculty may take testimony upon any matter coming within their powers. They shall meet at least twice a year, and examine candidates for licenses to practice medicine, and shall report in writing to the regents of the university all questions, answers, and opinions in each case. The examination shall be in anatomy, physiology, histology, pathology, theory and practice of medicine, chemistry, surgery, obstetrics, materia medica, therapeutics, and such other branches as they may consider proper. The questions in materia medica, therapeutics, practice of physic, and surgery or obstetrics, except the practical parts thereof, shall be proposed by an examiner in the same school to which the candidate wishes to be licensed; in all other respects the examinations shall be the same in each case. The records of the examinations and the findings of the faculty are to be a part of the public records of the university. Graduates of medical colleges in good standing with the faculty, who are over twenty-one years of age, and of good moral character, are eligible to examination on paying a fee of twenty-five dollars. At least six members must vote in favor of a candidate to give him a license, and then the regents of the university grant the license, for which the candidate pays the further sum of fifteen dollars. The faculty also have the power

to declare what shall be unprofessional conduct, and to withhold or revoke licenses for the same; such a vote must also be by a two-thirds majority. The faculty shall elect such officers and establish such rules as they may deem necessary, subject to the approval of the regents. The bill has no action upon persons now practicing under a legal registration, and provides that all persons wishing to commence the practice of medicine in this State must, besides getting the license of the medical faculty of the university, register in the county clerk's office the name, residence, place and date of birth, date of diploma, the institution granting the same, and the date of license to practice in this State; shall exhibit the diploma and license, and swear to the same; to swear falsely in registering will constitute perjury, and to practice under an illegal diploma, or without license, shall be a misdemeanor, rendering the person guilty thereof liable to a fine of two hundred and fifty to five hundred dollars for the first offense, and afterward to the same fine, and to imprisonment for not less than thirty, nor more than one hundred and eighty days. The bill defines the term 'practice of physic or surgery.' It charges itinerant vendors of drugs or nostrums a license fee of one hundred dollars a month, and exempts from its provisions the commissioned medical officers of the United States army, navy, and marine-hospital service, and the members of the house staff of any legally incorporated hospital.

"The bill is as follows: "

AN ACT to establish the Medical Faculty of the University of the State of New York, and to regulate the Licensing of Practitioners of Physic and Surgery.

Section 1. On or before the first day of June, 1884, the Governor shall appoint the Medical Faculty of the University of the State of New York, to consist of nine [9] members, who shall be legally authorized practitioners of physic and surgery in this State, but none of whom shall be connected with any medical school or college; provided, that in the appointments made the several systems of medical practice recognized by the incorporated State medical societies of this State shall receive *pro rata* representation, and all persons desiring to enter upon the practice of physic and surgery in this State after November 1, 1884, shall, before so doing, comply with the provisions hereinafter prescribed, and obtain the license hereinafter provided.

Section 2. Of the nine members of the said medical faculty, three shall serve, in the first instance, for three years, three for four years, and three for five years, and these terms shall be severally distributed by lot at the first meeting of the said faculty. All appointments made in the faculty at the expiration of the several terms fixed above shall be made uniformly for the period of five years each.

All vacancies occurring in the said faculty from whatever cause shall be filled, before the next semi-annual meeting of the same, by the appointment, by the regents of the university, from persons nominated by the several State medical societies, of a practitioner of the system of practice that had previously been represented by the seat so vacated.

Section 3. The said medical faculty shall examine all applicants for license to practice physic and surgery in this State; they shall meet at least semi-annually, and at such meetings shall faithfully examine all candidates referred to them for that purpose by the chancellor of said university, and furnish him a detailed report in writing of all the questions and answers of each examination, together with a separate opinion of each examiner as to the qualifications and merits of the candidates in each case. The president or secretary of the faculty shall have authority to administer oaths, and the faculty to take testimony in all matters relating to its duties.

Section 4. Such examination shall be in anatomy, physiology, histology, pathology, theory and practice of medicine, chemistry, surgery, obstetrics, materia medica, and therapeutics, and such other branches in the several departments of medical science as the said faculty may agree upon, subject to the approval of the regents of the university.

The questions forming such examinations shall be the same for

each class of candidates offering themselves, with the exception of the departments of materia medica, therapeutics, practice of physic and surgery, and obstetrics, except the operative practical parts thereof, in which branches the questions for each candidate shall be prepared by the representatives in the board of examiners of the system of practice to which such candidate wishes to be licensed.

Section 5. The said reports of the examination shall forever be a part of the public records of said university, and the orders of the chancellor, addressed to the medical faculty, together with the action of the regents in each case, shall accompany the same.

Section 6. Any person, on paying not less than twenty-five dollars into the treasury of the university, and on applying to the chancellor for the aforesaid examination, shall receive an order, addressed to the aforesaid medical faculty, instructing them to examine the candidates at one of the regular semi-annual examinations, provided that proof satisfactory to the chancellor is first given that the candidate is over twenty-one years of age, of good moral character, and has received a diploma issued to him or her and conferring on him or her the degree of doctor of medicine from some legally incorporated medical college held to be in good standing by the said medical faculty.

Section 7. The regents of the university, after finding that not less than two thirds of the members of said faculty have voted in favor of a candidate, and that such examination has been a satisfactory test of the qualifications of said candidate, shall issue to him or her a license to practice physic or surgery in the State of New York, for which license the candidate shall pay to the university the further sum of not less than fifteen dollars.

Said faculty may refuse to recommend a license to individuals guilty of unprofessional or dishonorable conduct, and they may revoke licenses for like cause upon a two-thirds majority vote after giving the accused an opportunity to be heard in his or her defense.

Section 8. The moneys paid to the university under the provisions of this act shall be appropriated by said regents for, and shall defray the expenses incurred by reason of the provisions of this act.

Section 9. The medical faculty shall establish such rules and regulations and elect such officers as they may deem necessary to insure the faithful execution of this act, subject to the approval of the regents of the university.

Section 10. Every person (excepting such as have heretofore lawfully registered pursuant to the laws of the State in force at the time) complying with sections 6 and 7 of this act shall, before commencing to practice physic or surgery, register in the clerk's office in the county where he or she practices or intends to practice physic or surgery, in a book to be kept by the said clerk, his or her name, residence and place and date of birth, together with the date of his or her diploma and by what institution granted, with his or her license to practice physic or surgery within this State; at the same time the person so registering shall exhibit both the license and the diploma herein required to the clerk, and subscribe and verify, by oath or affirmation, before a person duly qualified to administer oaths under the laws of this State, an affidavit containing a plain statement of all the facts as aforesaid, including his or her age, and shall file said affidavit and copy of said diploma with said clerk; said county clerk to receive a fee of twenty-five cents for such registration, payable by the person so registering. Nothing in this section shall be so construed as to prohibit medical consultations in the different counties of the State between legally qualified and registered physicians of this and neighboring States.

Section 11. A person who shall willfully swear falsely to any statement contained in the affidavit required by the tenth section of this act shall be deemed guilty of and subject to conviction and punishment for perjury, and a person who violates any of the other provisions of this act, or who shall practice physic or surgery in this State under cover of a diploma unlawfully issued or illegally obtained or without a license as provided for in this act, shall be deemed guilty of a misdemeanor, and, on conviction thereof, shall be punished by a fine of not less than two hundred and fifty dollars nor more than five hundred dollars for the first offense, and for each subsequent offense by a fine as aforesaid and by imprisonment for not less than thirty days and not more than six months. The fine, when collected, shall be paid one half

to the person or corporation making the complaint, the other half into the county treasury.

Section 12. For the purpose of this act the words practice "physic or surgery" shall mean to annex the letters M. D. to one's name or to suggest, recommend or prescribe, direct or employ, as a matter of business or for a fee, for the use of any person, any drug, medicine, appliance, apparatus or other agency, whether material or not material, for the treatment, cure, relief, or palliation of any real or supposed ailment or disease of the mind or body; or for the treatment, cure, or relief of any wound, fracture, or other bodily injury or infirmity and deformity.

Any itinerant vender of any drug, nostrum, ointment, or appliance of any kind, intended for the treatment of disease or injury, or who shall, by writing or printing, or any other method, publicly profess to cure or treat diseases, injuries, or deformities by any drug, nostrum, manipulation, or other expedient, shall pay to the State a license of one hundred dollars per month, to be collected as provided for by law, as all other licenses are now collected.

Section 13. Nothing in this act shall apply to commissioned medical officers of the United States army or navy or of the United States marine-hospital service, nor to any of the members of the house staff of any legally incorporated hospital, during the term of their service as such.

Section 14. So much of chapter seven hundred and forty-six, laws of eighteen hundred and seventy-two; chapter five hundred and thirteen, laws of eighteen hundred and eighty; chapters eighty-six and six hundred and seventy-nine, laws of eighteen hundred and eighty-one; and all other acts and parts of acts inconsistent with this act, are hereby repealed.

Section 15. This act shall take effect November first, eighteen hundred and eighty-four.

It was moved and seconded that each section be read and discussed separately, and then adopted if found acceptable. Carried.

Dr. HUBBELL asked what was meant by the words *pro rata* in Section 1.

Dr. HOPKINS answered that by *pro rata* was meant that the examining faculty should consist of representatives of the various schools of medicine, and proportionate to the number of practitioners of each school in the State.

Dr. GAY stated that, if it was to be a mixed board, he must of course vote against it.

Dr. HOWE objected to the clause excluding college men from the faculty, because the bill would be opposed most strongly in New York for that reason.

Dr. CROMYX thought that, as there was no State University, no act could be passed to establish a medical faculty. He had no objection to a mixed examining board. He said no provision had been made for the method of appointing examiners.

Dr. CARY said he was a friend of the bill, and believed in a State examining board, but thought it would be strongly opposed by college men. He therefore moved that the clause excluding college men from the faculty be annulled. Seconded.

Dr. DAVIDSON thought it reasonable that there might be equally good men outside of medical colleges as in them. At any rate, college men might resign from the institutions with which they were connected to accept the higher office. That clause must remain.

Dr. HOPKINS then explained that nobody was excluded from that board; for professors could give up their positions. The clause meant that no one could be both professor and examiner at the same time.

Dr. HARTWIG described the German Licensing Board. The motion of Dr. Cary was then put to the vote and was lost.

Section 1 was then adopted unanimously.

Sections 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, and 15 were separately read and adopted unanimously.

Dr. STORCK, as Chairman of the Board of Censors, reported the Van Horst decision with regard to the United States Medical College of New York. The General Term had sustained the decision of the lower court. This decision affected the Hamburg College of Buffalo in the same manner as the above-named institution.

The society then adjourned until January 1st, the time of regular meeting.

FREDERICK PETERSON, M. D., *Secretary pro tem.*

NEW YORK PATHOLOGICAL SOCIETY.

A STATED meeting was held September 12, 1883, Dr. GEORGE F. SHRADY, President, in the chair.

This being the first meeting of the season, the attendance was small, most of the members not yet having returned to town.

OBSTRUCTION OF THE FEMORAL ARTERY NOT PRECEDED BY EMBOLISM.—Dr. VAN GIESEN said that at a former meeting of the society he had narrated a case in which thrombosis of the femoral artery occurred after pregnancy, not due, as he believed, to embolism. Since that time he had seen a very severe attack of phlegmasia dolens occurring in both limbs, with partial obstruction of the arteries, in which no signs of heart lesion could be discovered to indicate the possibility of embolism. He was inclined to the opinion, therefore, that there were cases of death of the intima preceding the formation of any considerable thrombosis in the artery, and independent of mechanical obstruction by an embolus. Whether or not the preceding condition should be called one of inflammation he was not prepared to say.

Dr. AMIDON asked whether the contracted form of kidney was present.

Dr. VAN GIESEN replied that kidney disease had not been discovered in either case.

Dr. AMIDON said he had asked the question because it was well known that not only in syphilis, but in chronic interstitial nephritis as well, a condition known as endarteritis obliterans sometimes occurred in the cerebral arteries, and he knew not why it might not also occur in the femoral arteries. He, however, had never seen the condition exist in the arteries of the limbs.

New Inventions, etc.

A NEW SPRAY APPARATUS.

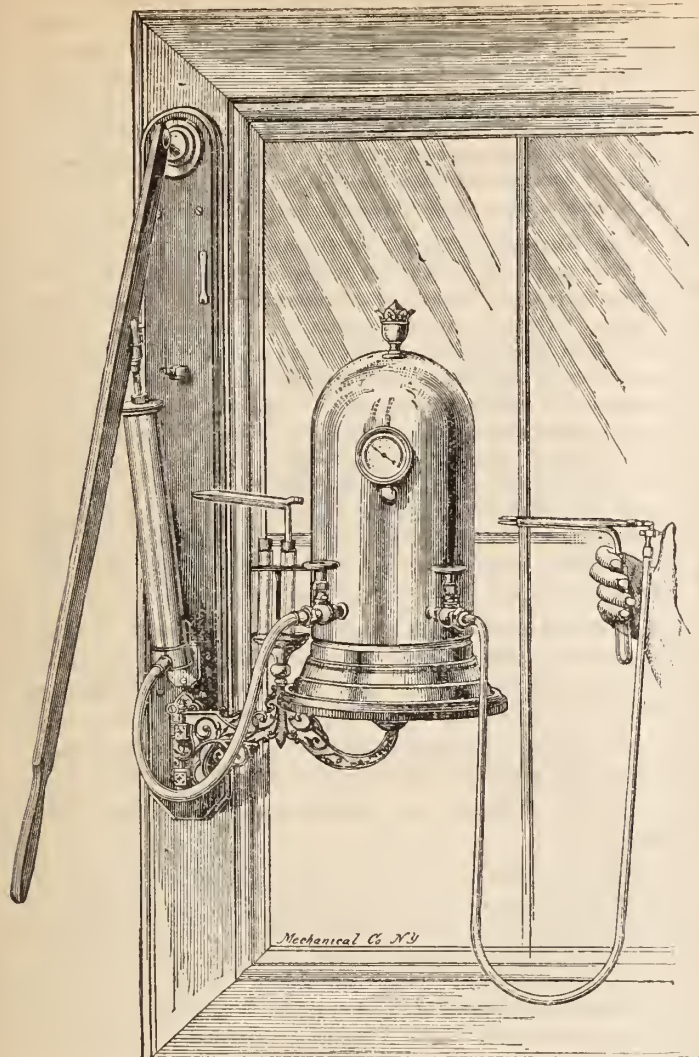
By WILLIAM C. WILE, M. D., SANDY HOOK, CONN.

Dr. WILE, editor of the "New England Medical Monthly," writes us as follows:

I desire to call the attention of the readers of your valuable journal to a new spray apparatus which I have recently devised, and which, for completeness and beauty, is excelled by none that I am aware of. The great trouble with most spray machines is the great labor involved in filling the receiver. This is all done away with, and a few easy strokes of the lever soon fill the tank. A brief glance at the accompanying cut gives the reader a good idea of the mode of its construction. Its advantages over all the others are briefly enumerated below.

The air-receiver is three times larger than ordinary, the value of which is at once apparent to any one who has used the old style. It is tested to two hundred and seventy pounds to the square inch, and, as the gauge which is attached to it only records eighty pounds, it will at once be seen that it is an eminently safe instrument.

The gauge is an accurate one, telling exactly the number of pounds pressure in the receiver at any time.



The valves are perfectly air-tight and very simple in their construction, and not at all likely to get out of order.

The pump, instead of being an ordinary affair held down to the floor by the feet when pumping, and being very laborious to work at twenty pounds pressure, is attached to a bracket with an oscillating piston and lever, and can be pumped to a hundred pounds pressure to the square inch with the greatest ease. When the gauge indicates one pound pressure, every full stroke of the piston increases the pressure one pound, thus making it a very easy and quick manner of filling the receiver. The receiver is detached from the pump in a moment, and rests on a swinging shelf, with a stand to hold the phials and tubes when not in use. The phials are of special design, with thick necks to prevent their breaking in putting the corks containing the tubes in, an extra collar of glass being provided for that purpose.

The cut-off is very simple in its construction, and not at all liable to get out of order. Is always ready for use, perfectly air-tight, and responds to the lightest touch.

The spray-tubes are after the pattern of Sass, but, instead of being made of two tubes cemented or riveted together, which are extremely liable to break or spring and leak, are made of one solid piece of hard rubber, and the tips, instead of being permanently attached to the body of the tubes, are screwed in and are made interchangeable. By the means of a small wrench, which accompanies each instrument, they are readily unscrewed and taken out for purposes of cleansing, which is a great convenience. Any one who has attempted to clean an ordinary Sass tube when clogged will appreciate this point. Their great

strength makes it almost impossible to break them by any ordinary usage. The metal parts are of the highest polish and nickel-plated; the wood is of black walnut, and so constructed as to be attached to a window easing or anywhere desired.

The lever is of ash, and is so made that by withdrawing a pin it becomes detached from the pump, the latter being held by a catch, the lever dropping out of the way. I was indebted during its construction to many valuable hints from Mr. John L. Saxe, of this place. Its low price, \$75, brings it within the reach of all.

Miscellany.

THERAPEUTICAL NOTES.—*Bromide of Potassium for Glycosuria.*—At a recent meeting of the Paris *Académie de Médecine* ("Union médicale," Aug. 30, 1883), M. Dujardin-Beaumetz summarized a paper, written by M. Félizet, as follows: As an adjunct in the treatment of diabetes, bromide of potassium has its advantages and its inconveniences. In cases of moderate intensity, and in certain grave cases, it causes the glycosuria to disappear, if used in conjunction with dietetic measures and alkaline remedies, but it produces debility. We should, therefore, be very cautious in its administration, especially to diabetes already profoundly enfeebled by the disease itself, and it should be watched attentively. Sometimes its effect is striking, and it is applicable in all forms and varieties of diabetes. In the discussion, M. Bouehardat, M. Lunier, and M. Hardy agreed with M. Dujardin-Beaumetz as to the caution to be observed, but M. Ricord spoke more favorably of the drug, and thought the furunculosis commonly attributed to its use was really due to the disease.

Paraldehyde and Acetal as Hypnotics.—At a recent meeting of the Berlin Society of Psychiatry and Nervous Diseases Dr. Langreuter ("Deutsche Medizinal-Zeitung," Aug. 23, 1883) gave his experience with these drugs during a period of eight months at a lunatic asylum.

The paraldehyde was employed in the form of the following mixture:

R Paraldehyde,	25.0 grammes;
Oil of peppermint,	5 drops;
Olive oil, enough to make	50.0 grammes.

M.

The difficulty of dissolving the paraldehyde and its burning taste were noted as drawbacks to its employment. The usual dose was 6 grammes; 2,300 grammes were used in all. Beyond a slight and transitory irregularity of the pulse, no abnormal phenomena were observed; in quality, the pulse was always somewhat fuller. During sleep produced by the drug the breathing was deeper and slower; the pupils were not generally so much contracted as in physiological sleep, but dilatation was noted in but few instances. Sleep ensued in from five minutes to half an hour. In two cases the patients fell from the chair within a minute after taking the dose. The sense of sleepiness was readily interfered with, as the speaker had proved in his own person; quiet, therefore, favored the hypnotic effect, which took place after ninety per cent. of the evening doses, and after sixty-one per cent. of those given by day. In sixty-one per cent. a full night's sleep (seven or eight hours) was produced. A quieting influence was exerted even when sleep did not follow—most strikingly in excited paralytics and epileptics. In certain nervous affections, such as migraine, etc., the effect was favorable also.

The action of acetal was not so satisfactory, and only half as energetic, the medium dose required being from 8 to 10 grammes. Moreover, the taste and smell were found much more intense, and the effect was not so lasting. Nevertheless, excited patients became quieter, even if they did not fall asleep, contrary to what was observed after the use of chloral. In all, 2,700 grammes were used. Out of one hundred and sixty-seven trials, seventy-five per cent. were successful. Six grammes of paraldehyde and 10 grammes of acetal were each

found equal to 2·5 grammes of chloral in activity. Although both the new drugs were dearer than chloral, they were to be preferred in certain cases in which the latter was contraindicated, as in cardiac affections. The speaker did not recommend acetal.

Croton-chloral in the Treatment of Whooping-Cough.—W. C. Webb, M. D., of Bryantsville, Kentucky ("American Practitioner," August, 1883), has come to the conclusion, from the treatment of nearly two hundred cases of whooping-cough, that croton-chloral is by far the most valuable single remedy for its relief. He has found that it is well borne by children. To affect the disease it must be given in decided doses. A child twelve months old will bear one grain of the medicine every four hours throughout the twenty-four. During the first week not less than this should be given. Thereafter, the cough is usually so much relieved that few if any doses are required at night. If the drug be thus pushed to its full effect, there are few cases that may not be entirely controlled in a fortnight. The dose for children ten years old should be two grains every four hours; adults will bear only about four-grain doses. The drug thus used does not derange digestion or affect the vital nervous centers. The first few doses may cause some irritation about the throat and fauces, but this soon ceases. The relief is so marked in some cases that patients fall asleep in their chairs.

Croton-chloral, if pulverized, will dissolve readily in compound tincture of cardamom. The following is a good prescription: $\mathcal{R}$ Croton-chloral, 3 i; tinct. cardamom., glycerin, aa $\mathfrak{z}$ ij. M. Sig. One half teaspoonful every four hours, for a child two years old and under. A less expensive and very useful mixture is as follows: $\mathcal{R}$ Croton-chloral, 3 i; tinct. belladonnae, 3 ij; tinct. cardam. co., $\mathfrak{z}$ ij; glycerin, $\mathfrak{z}$ iij. M. Sig. Dose, one half teaspoonful. If the paroxysms of cough are exceedingly severe, and if there is extreme gastric irritability, the croton-chloral should be preceded by a few whiffs of chloroform. The anæsthetic thus used produces the happiest effects, and it need not be repeated more than two or three times. The combination of bromides with the croton-chloral is of doubtful utility. If any of them are to be used, the bromide of quinine should be preferred. Watchfulness should, of course, be exercised during the use of croton-chloral, lest toxic symptoms should be manifested.

CARBON MONOXIDE AND PREGNANCY.—A debated point in animal physiology is the question whether carbon monoxide can pass from the maternal to the foetal circulation. The influence of the subject outside the sphere of pure physiology is small but important. Accidentally or suicidally, a pregnant woman may have succumbed from the respiration of fumes from burning charcoal. Can the life of a viable foetus be saved by the timely aid of a Cæsarean operation? From his investigations on rabbits M. Hoyer has answered this question in the affirmative, since he was unable to detect the gas in the foetal circulation by means of a spectroscope. MM. Gréhant and Quinquaud, however, conclude (see "La France médicale," No. 16) that, in small quantities, carbon monoxide may pass over from the maternal to the foetal blood.—*Lancet*.

THE LOCAL TREATMENT OF ACNE SIMPLEX AND ROSACEA.—In a recent thesis, an abstract of which we find in the "Journal of Cutaneous and Venereal Diseases," M. Morin says that this can be satisfactorily carried out only by direct action upon the malady at its original seat. The following is the method devised and recommended by the author: He takes a fine darning-needle, having an eye somewhat longer than that of a sewing-needle. Holding this by the point, he introduces it into the affected gland by a rotary movement which causes some of the sebaceous matter to lodge within the eye of the instrument. The latter is withdrawn, cleansed, and re-introduced, and the operation is repeated once or twice until, the gland being emptied, its floor is touched by the needle, when a slight pricking sensation is experienced. The same needle, or another similar one, held in the same way, is then dipped in an alcoholic solution of iodine—of greater or less strength, but never weaker than that of the French pharmacopœia—and is again passed into the gland, charged with a drop of the iodine tincture, which is thus brought into immediate contact with the focus of the disease. After a few minutes a clear liquid, slightly colored by the iodine, will exude from the gland, sometimes in a drop as large as a tear. This flow will cease within an hour. Twenty-four hours later, in cases of

acne simplex, the inflammation, when unaccompanied by suppuration, will have wholly disappeared. If suppuration, however, had existed, it will be found perceptibly diminished, needing only two or three repetitions of the process to effect its entire cessation, followed by a permanent cure. Rosacea, being of a more intractable character, requires the application to be made several times, when results equally favorable will certainly be obtained. The advantages claimed for this mode of treatment over any local measures previously employed are: That it is easily carried out; produces no additional disfigurement; is painless; does not necessitate the seclusion of the patient, and may be relied upon to effect speedy cures even in cases otherwise hopeless.

THE MECHANICAL THEORY OF DYSMENORRHEA.—The "Lancet" closes an appreciative and just review of Herman and Vedeler's researches (already summarized in our columns) with the following remarks: "These figures show that the same proportion of women suffer from dysmenorrhœa, be the uterus straight, slightly flexed, or acutely flexed. It appears, then, that, from whatever point these observations are examined, they lead to the same result—a result which entirely removes the ground from under the feet of the advocates of the mechanical theory of uterine pathology. These facts have been sought for, not in states of disease simply, but also in states of health, and, unless the accuracy of the observations can be impugned and the error pointed out, the pathology based upon the mechanical theory must be discarded and replaced by another more consonant with the anatomy and physiology of the organs concerned."

AN AGED PHYSICIAN.—It is reported, says the "Lancet," that Dr. Jackimovicz, of Jarvzinka, in the government of Kiew, Russia, has just died at the age of 106, and that he was able until near the close of his life to superintend the working of an extensive practice.

THE AMERICAN ACADEMY OF MEDICINE will hold its next annual meeting in New York on Thursday and Friday, October 4th and 5th.

THE ALBANY COLLEGE OF PHARMACY opens its next term October 1st.

ARMY INTELLIGENCE.—*Official List of Changes of Officers serving in the Medical Department of the United States Army from September 8, 1883, to September 15, 1883.*—BARTHOLF, JOHN H., Captain and Assistant Surgeon. Station changed from Fort Lapwai, Indian Territory, to Vancouver Barracks, Washington Territory. Par. 2, S. O. 123, Department of the Columbia, September 6, 1883. — BANISTER, J. M., First Lieutenant and Assistant Surgeon. Assigned to duty at Fort Adams, Rhode Island. Par. 3, S. O. 170, Department of the East, September 10, 1883.

NAVAL INTELLIGENCE.—*Official List of Changes in the Medical Corps of the Navy during the week ending September 15, 1883.*—Surgeon G. S. Beardsley and Passed Assistant Surgeon George C. Lippincott, detached from the Galena, and placed on waiting orders. — Passed Assistant Surgeon H. T. Percy, detached from the Naval Hospital, Norfolk, and ordered to the United States steamer Galena. — Surgeon George A. Bright, detached from the Naval Rendezvous, Philadelphia, on September 30th, and ordered to the Galena, October 1st. — Passed Assistant Surgeon R. A. Urquhart, ordered to the Alert on October 6th, and, on the arrival of that vessel at Yokohama, Japan, to be detached and to report for duty at the Naval Hospital at that place. — Passed Assistant Surgeon M. H. Simons, to be detached from the Naval Hospital, Yokohama, Japan, on the reporting of his relief, and ordered to the United States steamer Alert.

SOCIETY MEETINGS FOR THE COMING WEEK.—*Monday, September 24th:* Medical Society of the County of New York. *Tuesday, September 25th:* Council of the New York Academy of Medicine; New York Dermatological Society (private); Medical Society of the County of Lewis, N. Y.; Jersey City Pathological Society (private). *Wednesday, September 26th:* New York Pathological Society; Auburn (N. Y.) City Medical Association. *Thursday, September 27th:* Section in Obstetrics of the New York Academy of Medicine; Brooklyn Pathological Society. *Friday, September 28th:* New York Clinical Society (private); Yorkville Medical Association (private); New York Society of German Physicians (private).

Lectures and Addresses.

LECTURES ON

DISEASES OF THE KIDNEYS.

DELIVERED AT THE COLLEGE OF PHYSICIANS AND SURGEONS,

By FRANCIS DELAFIELD, M.D.,

PROFESSOR OF PATHOLOGY AND PRACTICAL MEDICINE.

LECTURE III.

The Symptoms of Bright's Disease in General; the Morbid Anatomy of Acute Parenchymatous Nephritis.

GENTLEMEN: I was describing to you yesterday some of the symptoms which are common to all the different varieties of Bright's disease of the kidneys, and I spoke to you, in the first place, of the signs that exist in the urine.

Another symptom which occurs in a good many cases of chronic Bright's disease, and in acute Bright's disease as well, though not in all, is dropsy. And by dropsy I mean the exudation of the serum of the blood through the walls of the blood-vessels, and the accumulation of it in the subcutaneous connective tissue and in the various serous cavities of the body. Such a dropsy is not by any means confined to Bright's disease. We may have it produced simply as a result of great anæmia. The constant occupying of one position is capable of producing a certain amount of dropsy. Thus, if a person stands on his feet all day, and day after day for a long period of time, he may get up a dropsy of the feet and legs simply as a result of maintaining this one position. Then, again, anything causing an obstruction of the veins is capable of producing such an extravasation of serum into the connective tissues. In the case of renal diseases it is not always easy to tell the exact reason for the formation of dropsy. It is supposed by some to be due to changes that have taken place in the composition of the blood, and especially in the composition of the serum of the blood. Others think that it is due to the loss of albumin, which passes away in the urine, and so leaves the blood extremely thin and allows it to exude through the vessels. Others believe it is caused by certain changes in the walls of the blood-vessels, or in the force of the circulation and the pressure of the blood. Some of these various explanations will answer well enough for some of the cases of Bright's disease, but none of them for all. In those chronic cases where we do regularly have changes in the composition of the blood, and also changes in the circulation, and often, too, changes in the structure of the walls of the blood-vessels throughout the body—in those cases it is easy enough to understand the dropsy. But in some cases of acute Bright's disease we find it difficult to understand the reason for the production of dropsy. There are some of these cases in which the patient was previously completely well, and yet within a few days he becomes affected with general anasarca, and there is an accumulation of fluid in the different serous cavities. Here it is difficult to understand why the dropsy should come on so suddenly

and be so extensive. The importance of understanding the causation of the dropsy is not a mere matter of theoretical importance, but it is a matter of real practical consequence, for, if we could understand the cause in each case, we should then know better what to do to get rid of it.

There are disturbances of the function of the stomach in a large number of cases of Bright's disease. Sometimes this manifests itself simply as a loss of appetite, or at other times in the development of symptoms of gastric dyspepsia, or in attacks of nausea and vomiting which may last for hours or days. In old cases of kidney disease there is apt to be produced a real lesion of the stomach in the shape of a chronic gastritis, and this adds its symptoms to those previously referable to the stomach. As to the intestines, the only symptom in these belonging to Bright's disease is a diarrhœa, which has the character of an ordinary loose fecal diarrhœa. This is especially apt to appear in patients who are dropsical, and who at the same time are passing only small quantities of water. But it may also be present in many cases of chronic Bright's disease without the existence of any great degree of dropsy, and with but slight diminution in the quantity of urine.

The lungs, too, are very apt to present some symptoms, and the most prominent one of these is dyspnœa, or a difficulty in breathing. The most characteristic form of dyspnœa with Bright's disease is that which occurs where there is no structural change in the lungs, no œdema, no accumulation of fluid in the pleural cavity, no disease of the heart, and no organic lesion to account for it. Here the dyspnœa seems to be purely nervous in character, and analogous to spasmodic asthma in its causation. It does not exactly resemble spasmodic asthma, but it does in the fact of its being apparently purely nervous in character, and in there being nothing as regards the mechanical condition of the lungs to prevent the patient from breathing as quietly and easily as any one. But the fact is that breathing is often a very difficult matter with these patients, and they are obliged to sit propped up in bed in order to catch their breath, and they may remain in this condition night and day for days or weeks in succession. In other cases the dyspnœa is really accompanied by an organic disease of the heart, or an accumulation of fluid in the pleural cavity, or by œdema of the lungs sufficient to account for it. But the nervous dyspnœa is that which is especially characteristic of Bright's disease, and particularly annoying to the patient.

In some cases, and especially in chronic cases of Bright's disease, we have changes referable to the eyes, and the patients lose their vision to a greater or less degree. These changes take place in three different ways: First, in some cases of Bright's disease the patients partly or almost completely lose the power of vision; and this may persist for hours or days, and then the sight returns; and yet, upon examination, we can find no structural changes at all, either in the retina or in the optic nerve. But more frequently we do find actual changes in the retina and optic nerve to account for the loss of vision. Sometimes there is simply a neuro-retinitis, an inflammation of that portion of the optic

nerve which is close to the eyeball, and of that part of the retina immediately around the optic nerve, and this is accompanied by a swelling of the optic disc and the retina, and an infiltration of them with serum. In other cases we find the retina the seat of an inflammation particularly characteristic of Bright's disease—a nephritic neuro-retinitis, as it is called. This is an inflammation of the optic disc and retina which involves a considerable portion of the retina, into which there is an infiltration of serum and an extravasation of blood; and there is also a degeneration of certain portions of the retina, altogether presenting a perfectly characteristic ophthalmic picture.

A moderate number of patients, and especially those with chronic Bright's disease, suffer more or less from neuralgic pains, referred most frequently to the face and head, but sometimes located in other parts of the body. These pains have the characteristics of an ordinary neuralgia; that is, they are short, sharp pains, shooting along the course of the nerves, lasting a few moments or perhaps several hours, and then suddenly disappearing, and apt to recur and be repeated over and over again at irregular intervals. These neuralgic pains are not so very common in Bright's disease, but they are a marked feature in some cases, and they may be so severe as to distract your attention from the real lesion from which the patient is suffering, and especially so if there is no dropsy present, and no other symptom except the changes in the urine to arouse your suspicions.

The blood also undergoes changes in its composition in all cases of Bright's disease which have existed for any length of time. But as to the exact nature of these changes we are very ignorant. We only know that the blood seems to be thinner and more watery than it should be, and it has not the same red color as is natural. In some patients there seems to be an excess of the serum of the blood, and in others there are extraneous substances found in the blood during life. But these changes are not found in all patients. What further changes there are in the composition of the blood we hardly know. But certainly they must be very important ones, for the blood is no longer able to nourish the body as it should. These changes in the blood therefore seem to be, perhaps, the most important results of Bright's disease.

We have in some patients with Bright's disease cerebral symptoms which may be only slightly developed or very strongly marked. Of these, headache is very commonly observed, either alone or else associated with a certain amount of apathy and dullness, or with the headache there may be associated an unnatural degree of restlessness and activity and inability to sleep. This sleeplessness occurs in a very large number of cases, and it is often a very distressing symptom, and one that it is difficult to relieve.

In some cases you may also have involuntary contractions of the voluntary muscles. These contractions may only involve certain groups of muscles, and especially those of the face, but in other cases all the voluntary muscles of the body are affected, and then we get general convulsions. These general convulsions are always a very marked feature of Bright's disease when they occur. You may have, either in acute or in chronic Bright's disease, a single convulsion

only, or such attacks may be repeated at intervals for days or weeks, or months in succession, or one after another may occur within a very short period of time. A patient may have five or six convulsions at intervals of only a few minutes between them, and in very bad cases they go on thus for twelve or twenty-four hours, it may be, succeeding each other very rapidly. In other cases the dullness and stupor appear first, and they become more and more marked until they have changed into a condition of complete unconsciousness, or they may even become so extreme as to resemble the coma of apoplexy. But you are more apt to have this unconsciousness followed by true convulsions. These cerebral symptoms, with the exception of the headache, are apt to occur in attacks. A patient may go on suffering from chronic Bright's disease for months or years, and during the largest part of the time have no cerebral symptoms at all, and then there will, perhaps, be suddenly an abundant development of cerebral symptoms, lasting, it may be, for hours or days, and then terminating in the death of the patient; or they may again disappear, and the patient will go on for another period of time perfectly free from cerebral symptoms. We have an exception to this rule in the case of headaches, which, while they may occur in attacks, we also may get as a continuous condition without any separate attacks. When a patient has one of these attacks of cerebral symptoms of which I have spoken, there are very apt to be at the same time attacks of the peculiar spasmodic nervous dyspnoea of Bright's disease, and repeated attacks of vomiting, and a diminution in the amount of urine. When a patient does have such an attack as this, he is usually said to have an attack of uræmia. These are commonly called uræmic attacks from their supposed origin, and they are always a very important feature when they occur in a case of Bright's disease. If a patient gets along without having any such uræmic attacks, as he may, the course of the disease is apt to be a much more comfortable one. But when a disposition is shown to the development of such attacks, then the disease becomes a very distressing one, and calls for relief from the physician.

The prominent nature of these attacks of uræmia and their severe character, and the fact that they often terminate in death, has always drawn a good deal of attention to them, and various efforts have been made to find out their cause; for, if we could determine this, then we could act intelligently in trying to prevent their occurrence or to relieve the attacks themselves. It is evident that these attacks have something to do with the functions of the brain, and we know that there is some disturbance in the functions of the brain, no matter if we are ignorant of the way in which it is produced. We know that there are changes in the brain which are capable of producing cerebral symptoms in other diseases where there are similar anatomical changes in the tissues and in the membranes of the brain, and we also know that changes in the composition of the blood are capable of irritating the brain in some way, and so may give rise to cerebral symptoms. These changes in the circulation may be either changes in the composition of the blood or changes in its quantity, or changes in the relative proportion of the venous and arterial blood entering into

the circulation of the brain. When we come to look into the facts at our disposal as regards the causation of the cerebral symptoms in diseases of the kidneys, we notice, in the first place, that these cerebral symptoms are specially common in connection with cases of chronic Bright's disease, and markedly so in that form of the disease in which the kidney becomes diminished in size, and in which there is an actual disappearance of a certain amount of the kidney tissue, and also marked changes in the tubules, the blood-vessels, and the stroma of the organ. We know, also, that a simple abolition of the function of the kidneys does not usually produce a uræmic attack; for when one or both ureters suddenly become blocked up by the passage of large calculi into them from the pelvis of the kidney, or when by an operation an only kidney is extirpated, as has been the case, or where injuries to the urethra have been followed by suppression of urine—though in these cases the function of the kidney is directly interfered with, and little or no urine is passed—yet, as a rule, there are no cerebral symptoms induced. We also know that some patients may have a number of these uræmic attacks. Patients with that form of chronic Bright's disease especially in which there is the atrophied kidney may go on with no cerebral symptoms for a number of years, and then perhaps during the course of one or two years they may have several uræmic attacks, but yet in the months between the attacks they may have no cerebral symptoms at all. So, from the consideration of all these facts, it is evident that the condition of the kidneys alone can not be the only cause of the production of these uræmic attacks.

Again, patients may have attacks of the very same character with very little change in the structure of the kidneys, if any at all, as in cases of simple chronic congestion of the kidneys, where there may be well-marked uræmic attacks. In the pregnant woman, also, either in connection with a chronic congestion, or with no change in the kidneys at all, there will sometimes be well-marked uræmic attacks.

Some patients with chronic diseases of the arteries, or in whom there is an habitual high tension of the blood, may have these attacks when there is no disease of the kidneys at all. So, you observe, the problem for us to solve is a very complicated one indeed, for we have found, in the first place, that the functions of the kidneys may be suspended altogether without producing any uræmic attacks; and, in the second place, that there may occur uræmic attacks similar to those of Bright's disease in cases where there is no change in the kidneys at all.

We also find, as we go on examining these patients with chronic Bright's disease, that in some of them there really occur actual changes in the membranes covering the brain. It is quite common to find in them a certain amount of thickening of the pia mater, which is evidently due to a long-existing inflammatory process, and really there has been a chronic meningitis which has taken on a very slow and sluggish type, and caused a thickening of the membranes of the brain.

In some cases, also, the brain is found to be very anæmic, or it may be œdematous and infiltrated with serum, and the space between the ventricles of the brain and the

pia mater may be filled with serum. So in some cases we really do have structural changes more or less extensive, both in the brain and in its membranes. But these changes, although they exist in some cases, do not in all; and, although we may find them sometimes in patients who have shown cerebral symptoms, yet we also find them where there have been no cerebral symptoms; and, finally, we may find cerebral symptoms have existed in cases where there are no structural changes in the brain at all. Then, when we come to the consideration of the blood, we find that there are generally changes in the composition of the blood, so that it contains more urea or other extraneous substances than it should. It was the discovery of this fact that led to the adoption of the name commonly given to these attacks; that is, they were called uræmic attacks because it was supposed at one time that they were directly due to blood-poisoning from the urea and other similar waste products circulating in the blood. This belief in the origin of the attacks is still maintained by many; but, if it is the explanation of some cases, it is not true of all; for a patient may pass no urine at all, and the blood may then be loaded with urea and other excrementitious products, and yet there will be no cerebral symptoms developed, while on the other hand there may be cerebral symptoms in cases where no urea or other excrementitious substances can be found. So if this condition of the blood does cause uræmic attacks it is only one of the causes, and not the source of all attacks.

Then as regards the quantity of blood which passes through the brain. This may be altered by changes in the cerebral arteries, either from disease of their walls, or from a temporary spasmodic contraction of them, though of this latter change we have no actual demonstration. We can also suppose that changes in the arteries in other parts of the body may easily have some influence in producing these attacks, for a chronic inflammation of their coats, or a sudden spasmodic contraction of them, may cause such a disturbance in the whole arterial circulation as to be felt by the brain. Or, again, we can well suppose that a too forcible or a too feeble action of the heart may act as a cause of these attacks by changing the amount of blood circulating in the brain. Then there is another feature, an example of which is seen in some cases, and especially in the uræmia of pregnancy, where there is an actual increase in the whole amount of blood in the vascular system.

You observe, therefore, that I retain the old name, and call these attacks uræmic only as a matter of convenience, and not because I believe that they are always, or even very often, due to an accumulation of urea or other excrementitious substances in the blood. But if we balance the probabilities of all the various theories as to the causation of these attacks, I think we shall reach the conclusion that they seem to be due in general to two causes which usually act together. These are: (1) a change in the composition of the blood, and (2) a change in the condition of the circulation of the blood through the vessels of the brain. When, therefore, we have these two conditions associated, we seem to have present the two features necessary for the production of these uræmic attacks. By changes in the com-

position of the blood I mean not only the accumulation of urea and similar substances in it, but also those other changes, the nature of which we are ignorant of, relating to the amount of water and various other substances in it. This view I have now given you of the nature of these uræmic attacks has a direct bearing on the proper treatment of them when they occur.

Now we will leave these general considerations and go on to a study of the actual diseases of the kidneys.

Acute Parenchymatous Nephritis.—In acute parenchymatous nephritis we have offered to us many different degrees of the inflammatory process. Some of these cases are very severe in character, and in some of them the inflammation is very mild, and therefore there is a difference both in the extent of the kidney lesion and in the variety of the symptoms in different cases. And, first, as regards the kidney lesions. The essential lesion in all cases is a change in the epithelium of the tubules and the epithelial cells lining the capsules of the Malpighian bodies. The blood-vessels of the kidneys, and the stroma, and the Malpighian bodies themselves, undergo no special changes; but the epithelium lining the tubules, and to a less extent that lining the capsules of the Malpighian bodies, does undergo very important changes.

In very mild examples of acute parenchymatous nephritis there is no great change observable in the size and the gross appearance of the kidney. Its size, weight, surface, color, and general appearance are essentially the same as in a normal kidney. But, on more minute examination with the microscope, we find that there are changes in the epithelium of the convoluted tubes of the cortical portion of the kidney; there is a certain amount of swelling and degeneration of this epithelium.

If you examine a case where the inflammation is more severe in character, you will find the gross appearance of the kidney changed. It is larger than normal, and this increase in size is due principally to a thickening of the cortex, which is seen to be swollen, and so the whole organ appears larger and heavier. Its surface still remains smooth, and there is no adhesion of its capsule and no congestion in its vessels. But, when you come to look at the cortex, you find that it is not only thicker than natural, but also whiter and paler; and this pallor contrasts with the red color of the pyramids, which retain their normal appearance. You will find the most marked changes to be those in the epithelium, and they involve the epithelium lining nearly all the tubes in the cortex and some of those in the pyramids, and the cells lining the capsules of the Malpighian bodies. You may also find some hyaline-cast matter in the tubes.

In still more severe cases, the changes in the gross appearance of the kidney are very great. The two kidneys may weigh a pound or more, and the cortical portion is very decidedly thickened and usually pale, or sometimes it has a mottled appearance, and a succulent-looking serum exudes from the cut surface. But sometimes there is no pallor of the cortex, but rather an actual congestion. Microscopical examination shows extensive changes in the epithelium of most of the tubules. It is swollen, granular,

disintegrated, broken down in places, and separated from the walls of the tubules; and casts also are present in many of the tubules, mixed with broken-down epithelium and blood-globules, and in some of the tubes you may find blood collected in considerable quantities. These are all the changes that take place in acute parenchymatous nephritis, and in all cases they are essentially of the same character, but differ only in their intensity and amount.

Original Communications.

REPORT OF TWENTY-ONE CASES OF SUBCORACOID DISLOCATION OF THE HUMERUS

REDUCED BY KOCHER'S METHOD.

By CHARLES A. JERSEY, M.D.,

LATE HOUSE SURGEON TO THE CHAMBERS STREET HOSPITAL.

PROFESSOR KOCHER, of Bern, in 1870, published an article recommending a new method for reducing recent subcoracoid dislocation of the humerus;* and, in 1881, read a paper before the International Medical Congress, London, on the employment of the same method in luxations of long standing, stating in full the manipulation required, and giving a record of twelve cases, from three weeks to four months old, reduced by it; in one case, a patient seventy years of age, he was unsuccessful, fracturing the humerus; the case was of eight weeks' duration.†

Ceppi, in 1878, published an article on the reduction of subcoracoid dislocations by Kocher's method,‡ and, in October, 1882, in the "Revue de chirurgie," a second article on its employment in cases of long standing, recommending it as a procedure by which the head of the humerus may be replaced by the employment of little force and without anæsthetics.

Garafi, in 1881, wrote of Kocher's method, and recommended a modification of it for the reduction of subclavicular dislocations.§

Mr. W. Chisholm, House Surgeon of the University College Hospital, reports six recent cases—five subcoracoid and one subglenoid—under the care of Mr. C. Heath, reduced by this method; two subcoracoid required the administration of chloroform before reduction was accomplished, and the subglenoid was reduced only after some difficulty.¶ Let me here call attention to the fact that in only one of the subcoracoid luxations reported by Mr. Chisholm were all the movements recommended employed, replacement being accomplished during the third manœuvre in the others.

This method is recommended by Professor Kocher for

* "Eine neue Reduktionsmethode für Schulterverrenkungen." "Berliner klin. Woch.," 1870, No. 9.

† "Trans. of the Int. Med. Cong.," vol. ii, 1881.

‡ "De la réduction des luxations sous-coracoïdiennes traumatiques simples et récentes," Paris, 1878.

§ "Revue de chirurgie," November, 1881.

¶ "Lancet," April 14, 1883.

subcoracoid dislocations. Reduction, as directed by him, is accomplished as follows: Patient, sitting up; the forearm is flexed to a right angle with the arm, the elbow pressed firmly to the side of the chest; the arm rotated outward until firm resistance is met with; then, the arm still rotated, the elbow is carried forward and inward over the chest to near the median line;* then the arm rotated inward. The last movement is one of restitution, and carries the hand to the shoulder opposite the one dislocated. These manipulations resolve themselves practically into two movements—outward rotation and flexion, as insisted upon by Professor Kocher.

The difficulty experienced in accomplishing reduction of the head of the humerus in subcoracoid dislocation is due principally to the resistance offered to its return by the edges of the rent in the capsular ligament made at the time of the displacement. Traction and the manipulations of the older methods only serve to make the edges of this rent more tense, thus pressing the neck of the humerus more closely against the anterior edge of the glenoid cavity, and grasping more firmly the displaced head. Again, the inferior or posterior part of the capsule and the muscles which pass over and strengthen it cover over a portion of the glenoid cavity, partially occluding it, and in this way offer a further obstacle to the return of the bone to its normal position.

It is claimed by Professor Kocher that, by the use of the movements recommended by him, the edges of the rent in the capsular ligament are relaxed, more particularly the superior or anterior one formed principally by the coraco-humeral fibers, the obstruction caused by the inferior or posterior one removed, the opening rendered more patent, and the head of the bone approximated to the glenoid cavity. He says: "If now the arm is rotated so that the forearm, bent to a right angle, looks directly outward, this tense band † before mentioned, with the head of the humerus, is also turned outward, and thereby the inferior or posterior capsular wall is forcibly lifted away from the glenoid cavity, and the hole in the capsule rendered more patent. But the head of the humerus is still firmly pressed against the anterior edge of the glenoid cavity, because, by the motion just made (outward rotation), the upper part of the capsule, as well as its under part, is not in the least relaxed.

"It is only after flexing, and carrying forward the humerus in its position of outward rotation, that the upper part of the capsule is relaxed, and, in consequence of the tension of the under part, which still exists and prevents the head from gliding forward, that it (the head) is thrown backward into its cavity," ‡ etc.

This method of reduction was first suggested to me by Dr. William T. Bull, attending surgeon to the Chambers

Street Hospital. The following is a record of twenty-one cases of recent subcoracoid dislocations reduced by me, or under my supervision, while in charge of the out-patient department of that hospital. I am indebted to Dr. D. W. Montgomery and Dr. M. V. Wilkie for the record they have kept of the cases:

1. Adult male; reduced at the first trial without difficulty; discharged cured on the fifteenth day.
2. Adult female; reduction accomplished without difficulty at the first attempt; fifteenth day discharged cured.
3. Adult male, very muscular; first attempt, reduction accomplished; patient had some loss of power in the deltoid after reduction; twenty-fifth day discharged cured.
4. Same as last case; twenty-second day discharged cured.
5. Adult female; reduced at the first trial without difficulty; eighteenth day discharged cured.
6. Adult male, very muscular; reduced without difficulty; patient returned on the eighth day with humerus again dislocated; reduced; patient never returned.
7. Adult male; no difficulty in reduction; on the eighth day patient complained of loss of power in the forearm extensors; all movements of the shoulder joint perfect; gradual improvement in the power of the extensors under the employment of electricity.
8. Male, twenty years of age, longshoreman and very muscular; reduction effected at the third trial; reported, by letter, all movements perfect. This patient has had his arm dislocated six times within the past two years; reduction has always been accomplished, without ether, by extension and flexion over the foot in the axilla, but only after great difficulty; always refuses to wear a sling and body-bandage after the third day.
9. Adult male; reduced without difficulty; tenth day discharged cured.
10. Male, nineteen years old; very easily reduced; did not return for twenty-one days; then had about two thirds motion at the shoulder and elbow joints; one month, has not returned.
11. Adult male; replaced at the first trial; twelfth day one third motion; twenty-seventh day reported all right.
12. Adult male; easily reduced; fourteenth day all movements good; slight atrophy of deltoid muscle; thirty-first day reported all right.
13. Adult male, very muscular; patient frightened, and very restless; resisted movement; reduced successfully at the second attempt.
14. Adult male; easily reduced at the first trial.
15. Same as last case.
16. Adult male, very muscular; patient resisted strenuously all movement of the humerus; the head of the bone was only replaced at the fifth attempt.
17. Adult male; reduced at the first trial; tenth day discharged cured.
18. Same as last case.
19. Adult female; easily reduced.
20. Adult male; reduced at the first attempt without difficulty.
21. Adult female; easily reduced.

In this record it will be noticed that in seventeen cases the bone was replaced at the first trial without difficulty; in one case some trouble was experienced; in the remaining three cases the displacement was only accomplished after several unsuccessful attempts. Ether was not administered in any case. It was noticed that in a number of the cases the head of the bone was replaced when the elbow was be-

* The elbow in this movement should be kept away from the chest, and not closely applied to it.

† Professor Kocher here refers to the superior or anterior edge of the rent in the capsular ligament, which he affirms is formed chiefly by the fibers of the coraco-humeral ligament.

‡ Its point of insertion to the shaft of the humerus forms a fixed point, as it were, around which the humeral head revolves, the lower part of the shaft being used as a lever.

ing carried forward and over the chest, a fact to which Mr. Chisholm calls attention; unfortunately, a complete record of the number of times that this occurred has not been kept.

In those cases where a repetition of the manœuvres was necessary it was found that when some traction was made on the humerus in a downward direction, after the elbow had been applied to the side of the chest, and sustained throughout the remaining movements, reduction was effected with little or no difficulty. This is a procedure which I should recommend in all cases.

In examining the records of the twenty-one dislocations immediately preceding those here enumerated, all of them recent subcoracoid luxations, reduced by other methods, I find that the employment of an anæsthetic was necessary in seven cases before reduction was accomplished. The advantages claimed for Kocher's method are as follows:

1. The control obtained over the humerus by the position of the forearm.
2. The advantage obtained by the relaxation of the edges of the rent in the capsular ligament.
3. The absence of the necessity for the employment of an anæsthetic.
4. The absence of pain to the patient, and of discomfort to both surgeon and patient, as compared to other methods.

A CASE OF PUERPERAL SEPTICÆMIA.*

By GEORGE T. HARRISON, M. D.,

ASSISTANT SURGEON TO THE WOMAN'S HOSPITAL.

As the following case presents some features of interest, I venture to report it to the Obstetrical Society. On the 5th of last December I was requested by a man to visit his wife, who was in labor, as he informed me, and under the care of a midwife. The labor was a protracted one, and the husband at last became so much alarmed about his wife that he went in search of a physician, and was directed to me. Soon after my arrival at the bedside of the patient I ascertained that the uterine contractions, with the accessory forces, were inadequate to effect delivery within a reasonable time; and, as the woman was showing evident signs of exhaustion (though the child's head was resting upon the perinæum), I gave chloroform and applied the forceps. Careful as I was in my attempt to save the perinæum, I was by no means successful, but, on the contrary, found that I had caused a laceration extending through the external sphincter ani muscle. I immediately brought the divided surfaces together by carbolized silk sutures. Everything went on well until the third day after delivery, when the patient was seized with a severe chill, followed by high fever. In conformity with my instructions, the midwife had been using daily vaginal injections of hot water, to which carbolic acid was added; but as soon as the patient showed signs of septic infection, as the evidence of which I regarded the chill followed by fever, I determined to make use of intra-uterine injections. By the local treatment the temperature was brought down in a short time from 104° to 102° Fahr.; and by the fourth day after the chill

it had become normal. For the intra-uterine injection I used carbolized hot water, the strength of the solution being 2·5 per cent. On the eighth day after delivery the patient had a slight rise of fever, and I recommenced the use of the local treatment which I had just discontinued the day before. The injection was given at night. The patient summoned me to her bedside after I had retired, about 2 A. M., complaining of very distressing symptoms, which greatly alarmed her. She had dizziness, ringing in the ears, numbness of the limbs, great oppression about the region of the heart, and a tendency to nausea. I found no elevation of temperature, and the pulse not accelerated. As she had been feeling well when I used the uterine injection, and as these symptoms came on soon after I left her, I could not come to any other conclusion than that the alarming symptoms were caused by the absorption of carbolic acid. A confirmation of this hypothesis was obtained the day after by the character of the urine passed, which was of a peculiar greenish-black hue. In its odor and appearance the urine was so different from any she had previously passed that the nurse preserved it for my inspection, and called my attention to its peculiarities. As on the subsequent day I had a similar experience, I discontinued the use of the carbolic acid, and substituted in its place the sulphite of sodium. On the ninth day after confinement (December 14th) the pulse was 120, and temperature 103·5°. Uterine douche continued. At 5 P. M., pulse 148, temperature 104·6°. At 12 M., the pulse was 160, and the temperature, *per vaginam*, 106°. As the patient now exhibited signs of peritonitis, bimanual palpation demonstrating the existence of a considerable exudation in Douglas's pouch, and as the uterine injections had had no effect in reducing the temperature, large doses, too, of quinine internally being equally inefficacious, the use of cold water naturally suggested itself to reduce the temperature. The brilliant results obtained by Dr. Thomas in reducing the temperature, where fever ensued after the performance of laparotomy, by applying cold water to the trunk, encouraged me to adopt his method so far as I could under the circumstances. The use of the general bath was excluded, from the fact that I had no one to whom I could intrust its administration. I was therefore forced to extemporize an arrangement with the limited means at my disposal. A sofa was brought alongside the bed, an India-rubber cloth placed over it, and, at a point corresponding to the trunk of the patient, it was gathered into a fold, so as to make a gutter to discharge the water into a pan placed below. The patient's lower extremities were carefully covered with blankets, as well as the upper part of the body. Several folds of muslin were laid upon the abdomen, and then, by means of a Davidson syringe, the whole abdominal surface was irrigated. The temperature of the water was brought down gradually. At 4 P. M. the pulse was 148, temperature, *per vaginam*, 106·4°.

December 15th.—At 9 A. M., temperature 105°; patient looking much better. At 3 P. M., temperature 103·8°. At 6 P. M., pulse 132, temperature 103°. At 9 P. M., temperature 102°, pulse 124.

December 16th.—At 9 A. M., temperature 101°. At 1 P. M., temperature 102°, pulse 124. At 6 P. M., temperature 101·4°,

* Read before the New York Obstetrical Society, May 1, 1883.

pulse 112. At 10 P. M., temperature, 100.4°, pulse 611. Douche ordered every three hours. Previously it had been used every half-hour. As it was continued for fifteen minutes every time it was applied, in eighteen hours she was subjected to the action of the douche nine hours.

December 17th.—At 9 A. M., temperature 100.8°. At 6 P. M., pulse 88, temperature 100.4°. Catheterized twice during day. Patient is the subject of delusions. In the evening, apathetic. Has suffered for several days and nights from insomnia. At 9 P. M., temperature 101.4°.

December 24th.—The patient has not been able to pass urine for more than a week. Two bed-sores were discovered on the back over the sacrum. Patient voided urine during the night voluntarily.

December 26th.—Temperature 103.8°. Patient complains of pains in each side and shoulders; limbs ache. At 9 P. M., pulse 120, temperature 104°. I was disposed to attribute the rise of temperature to the effects of malaria, and, therefore, large doses of quinine were administered. There was no evidence of inflammation of any internal organ—no pleurisy, pneumonia, or disease of the pelvic organs.

The next day the temperature had returned to a normal condition. The mind of the patient had gradually cleared up, and she recognized those around her, though a few days ago she insisted upon it that her husband was some one else.

January 1st.—Patient sitting up and rapidly convalescing. Psychical disturbance following puerperal septicæmia I have observed several times.

THE USE OF WATER

IN THE

DIETARY OF YOUNG CHILDREN.

By CHARLES REMSEN, M. D.,

HOUSE PHYSICIAN TO THE NURSERY AND CHILD'S HOSPITAL.

DURING my service as interne at the Nursery and Child's Hospital this summer, one factor in the production of infant mortality during hot weather has impressed itself strongly upon my notice. I refer to the ignorance shown by most persons, especially in the lower ranks of society, in regard to the amount of water required by children, either nursing or artificially fed.

Because the natural food of young children is in a fluid form, the laity generally suppose that no further supply of water is necessary. In medical writings on this topic, also, too little stress is laid on the importance of giving minute instructions in regard to this point.

When we consider the difference in the amount of fluids taken by an adult during hot and cool weather, it can readily be understood how a supply of water amply sufficient to meet all the requirements of a child in winter may be totally inadequate in the dry heats of summer. No provision for an increased supply, however, of this necessary principle is made through the natural channels; but, if the call for it be not attended to, the most serious consequences will result.

The blood, having parted with much of its water to

supply the increased evaporation from the surface of the body, will take up very quickly the fluid portion of any food introduced into the stomach, leaving the solids too thick to be easily digested; these then ferment and produce indigestion and colic, and, passing downward, diarrhœa, and hence a further drain upon the blood. As a consequence of the thickened state of the blood thus produced, the excretion of sweat is stopped and a condition of collapse and hyperpyrexia developed.

When we take into account the fact that there is a larger proportionate area from which evaporation takes place in children than in adults, and that there is a greater amount of activity displayed in all the vital processes in the former, it is evident that their nourishment should be not only relatively greater in amount, but also given at much shorter intervals. In warm, dry weather, babies will drink cool water every hour, or even at shorter intervals, if, as it should be, it is offered to them. When they are suffering from diarrhœa, the amount they will drink, and the improvement produced by it are astonishing.

The earliest sign showing the amount of water in the system to be below the normal standard is a slightly depressed condition of the anterior fontanelle. This may be present in children who otherwise present the appearance of perfect health; yet any slight increase in temperature or deprivation of the breast for a few hours may give rise in them to a sudden hyperpyrexia. In nursing children, however, the attention is usually first aroused by fretfulness, a moderate rise of temperature and pulse, a hot, dry skin, and a constant desire to nurse. If a child in this state be given a free supply of water, and its nursing restricted in frequency, the symptoms will often disappear quickly and completely; but, if not, collapse will soon come on.

In this condition the temperature ranges from 105° to 106° F., or higher; the pulse is small and thready, and beats from 180 to 200 to the minute; the skin of the body feels painfully hot, while the extremities are cool; the features are pinched and sunken, the eyes are half closed, with the pupils contracted, the fontanelle is depressed, the hands are tightly shut, the respiration is hurried and irregular, and consciousness seems abolished. In the majority of cases vomiting and diarrhœa have been absent, or, at most, the patient has had one or two small slimy stools. A child in this state will swallow water offered to it with greediness and the expression of the utmost pleasure.

The treatment adopted at the Nursery for these emergencies consists in wrapping the patient in a wet sheet, applying cold to the head, and giving as much water by the mouth as the child will swallow.

The results of this simple method have been extremely satisfactory, the child becoming quiet, and even going to sleep, while all the threatening symptoms subsided with great rapidity.

The attention given to this point as a prophylactic measure among the inmates has been followed by a diminished rate of mortality, and a marked reduction in the number of gastric and intestinal complaints.

In conclusion, it may be said that if more care were directed toward giving children a proper amount of water,

and restricting their hours of nursing or feeding, the mortality due to hot weather would decrease, and less would be heard about the troubles of teething.

THE CEREBRAL CORTEX.

BY AMBROSE L. RANNEY, M. D.

(Concluded from page 315.)

We are prepared now to take up the *special types of cortex* which are met with; and to study the hints which are thus afforded respecting the functions of various parts. By the laws of analogy, we are led to infer that parts which have a similarity of construction, and in which the cell-elements are absolutely identical, probably have a similarity of function. If, on the other hand, the function of certain regions has, by physiological experiment, been clearly made out, we are led to study closely the minute structure of those special regions, with the hope of finding other localities where identical formations exist.

The *superficial layer* of the cortex has been described by Virchow as "the neuroglia"; by Kölliker as "connective tissue"; by Deiters as "spongy tissue"; by Rokitansky as "ependyma"; and by Wagner and Henle as "fused ganglion-cell substance." Similar tissue found in the olfactory lobes and Ammon's horn has been named "gelatinous substance" by Clarke, and "molecular substance" by Kupfer. Hence, we must be prepared to meet descriptions of this layer under the above-mentioned headings. This stratum varies perceptibly in thickness in different mammals, and, as Meynert expresses it, seems to be overbalanced and thrown in the shade by the deeper nerve-cell laden strata in the nobler types of brains. We find it relatively thin in the brain of man and the monkey, thicker in the dog and cat, and thickest (of all the domestic animals) in the calf. The cells found in this layer are chiefly star-shaped (Meynert),* have very little protoplasm, and possess many finely divided processes. These are probably non-nervous in function. A few nerve-cells are found, however, which are characterized by an excess of protoplasm (Deiters) and forked processes; and some nerve-fibers may be also detected in this layer (Arndt) in the region of the surface, which interlace in all directions. In the "gyrus uncinatus" this medullary layer is developed to a high degree.

In the majority of the convolutions of the cerebrum the cortex may be subdivided into five strata. The structural differences in the four strata, underlying the one already considered, consist in variations (1) in the relative density of distribution, and (2) in the form of the nerve-cells.

As regards the form, that of the *pyramid* (the only one recognized by Arndt, Luys, Stephany, and others) prevails in the five-strata type of cortex. In the *second* stratum, the cell elements are of small size and closely packed together; in the *third*, they are of larger size, gradually increasing both in size and distance from each other as you pass inward from the more superficial portion (the type peculiarly indicative of *Ammon's horn*); in the *fourth*, Meynert de-

scribes closely packed cells of small size (granule-like formation); in the *fifth*, the same author claims to detect spindle-

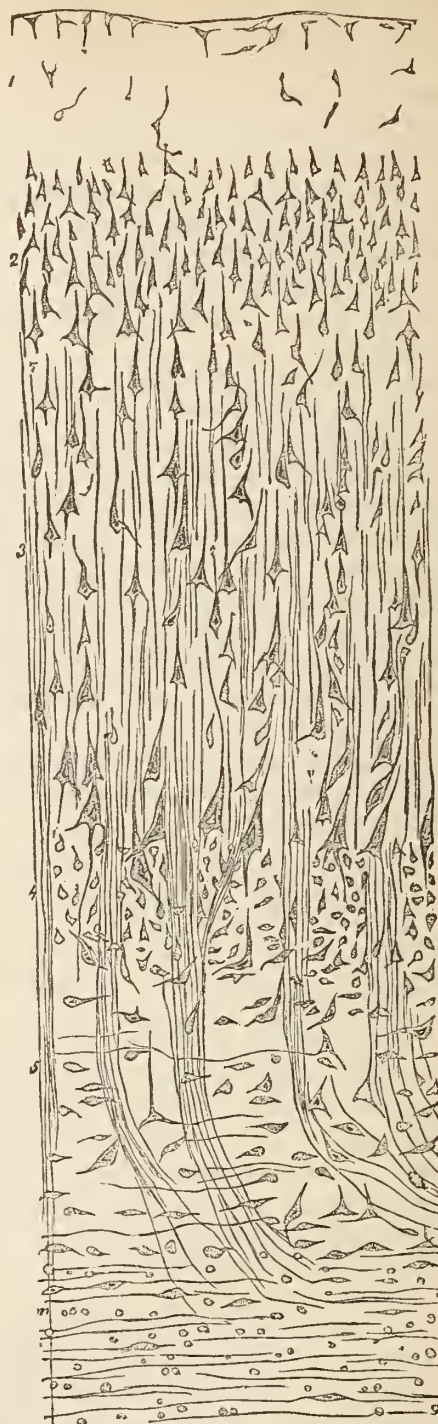


FIG. 4.—A TRANSPARENT SECTION FROM A SULCUS OF THE THIRD FRONTAL CONVOLUTION OF THE HUMAN BRAIN. (Meynert.) Magnified 100 times.

1, layer of the small dispersed cortical elements; 2, layer of the small, closely packed, pyramidal cortical elements; 3, layer of the large pyramidal cortical elements (Ammon's horn formation); 4, layer of the closely packed cortical elements (granule-like formation); 5, layer of the spindle-shaped cortical elements (claustrum formation); m, medullary substance.

shaped cells,* which he considers as particularly characteristic of the gray matter of the *claustrum*.

* Deiters recognizes only free nuclei in this layer. They measure about 10 μ in diameter, according to this observer.

* The spindle-shaped cells are not bipolar. Processes can usually be detected which spring from their sides as well as from their extremities.

Considerable variety occurs in different parts of the cerebral cortex in regard to the size and shape of the nerve-cells, and the relative thickness of the layers. It is especially worthy of notice that, in those regions of the cortex which have lately been shown to contain the *motor centers*, the deeper pyramidal cells have been found by Betz to be very large, and arranged in clusters or nests of four or five cells, which are more or less defined. These are often called the "giant cells." They bear a strong resemblance to the large motor cells found in the *anterior horns* of the gray matter of the spinal cord. Bevan Lewis and Clarke have paid special attention to the situation of these peculiar cells, and have arrived at the conclusion that they are chiefly found among the small cells of the fourth layer of the cortex. The same observers have applied the name "ganglionic cells" to these peculiar elements, which apparently have an intimate relation with the function of muscular movement, and have designated the layer of the cortex in which they are found as the "ganglionic layer."

In the neighborhood of the *calcarine fissure* large cells in the cortex are very scanty, their place being occupied by those of small size. In some parts of the cortex six layers may be discovered; this is due, as shown by Bevan Lewis, to an insertion of an additional layer of small cells between the third and fourth layers. The *claustrum*, *hippocampus major*, or *cornu Ammonis*, and the *olfactory lobe* present especially characteristic variations of the cortex from the more common five-strata type shown in the diagram; but time will not admit of a minute description of the peculiarities of each.* It may be stated, however, that the study of the cortical elements has afforded grounds for many attractive theories regarding the functions of special regions of the brain, and has also confirmed an opinion (previously formed by research in embryology and comparative anatomy) that the olfactory lobes and tracts are component parts of the brain, and are not to be classed among the cranial nerves. Luys has contrasted the structure of the olfactory bulbs with that of the retina; and the same author draws a strong analogy between these two organs of special sense and abridged projection systems.

From what has already been stated in regard to the anatomical construction of the cortex of the cerebrum, it seems logical to assume that *each zone may be thrown into a state of nervous activity independently of the others*, since the structure of the cells differs in the various strata. On the other hand, the connecting processes of the cell elements which unite the superimposed strata would seem to

* The researches of Bevan Lewis and H. Clarke in reference to the minute structure of the cerebral cortex in man and animals were published in the "Proceedings of the Royal Society" in 1878. The former author has also contributed articles to the "Philosophical Transactions" for 1880 and 1882. Meynert's valuable article is to be found in Stricker's work on histology.

The most remarkable deviations from the normal five-strata type of cortex are to be found in the incurved portion of the cerebral hemisphere in the region of the hippocampus major (*cornu Ammonis*), and in the olfactory lobe. Henle gives cuts showing excellent sections of both of these regions. The articles referred to above will furnish the reader with a complete description of the peculiarities of structure which are characteristic of each.

indicate that the *various zones of the cortex may be associated in their action* under certain conditions, and that the effects of nervous vibrations within the cells are in some way modified, according to the nature of the intermediate cells brought into play. Nervous actions, like vibratory undulations, are probably transmitted within the cortical substance both horizontally, along some special stratum, and vertically from the superficial to the deeper cells, or *vice versa*.

It is worthy of notice that in the *posterior horns* of the gray matter of the spinal cord we find cells of small size which are analogous in many respects to those of the second layer of the cortex; while in the *anterior horns* large cells predominate as they do in the third stratum. Morphological analogy would seem to indicate identical function. Luys advances the theory that the sub-meningeal strata which are characterized by the presence of cells of small size are to be considered as the areas of diffusion of general and special sensations; and that the deeper strata, characterized by the presence of large cells, are the centers for the development and emission of motor impulses. There is certainly some ground for a theory that the cortex may be regarded, from a physiological standpoint, as an extensive instrument possessing a sensory-motor function; analogous, in many respects, to the gray matter of the spinal cord, but endowed with special attributes of a higher order (consciousness, volition, memory, etc.).

We are inevitably forced to the conclusion that the cerebral cortex must be regarded as the chief, if not the exclusive, seat of *mental activity*. The essential proofs of the psychical function are as follows:

1. In the animal series, the cerebrum seems to be developed in excess of other parts of the brain in proportion as the individuals of any class approach the standard of man in mental powers. We judge of this by its weight, and also by the number of "convolutions," or "gyri," since the latter serve to increase the amount of gray matter in proportion to the superficial area of the brain.

2. In cases where the cerebrum is extremely small from birth, or where it is diseased, there appears to be a corresponding diminution in the higher mental faculties, or idioey exists.

3. Mental disturbance almost always follows injuries, compression, and diseases of the cerebrum—as evidenced by insensibility, somnolence, abnormal excitement, or some marked eccentricities of demeanor.

4. Experimental physiology has shown that a removal of the cerebral hemispheres in the bird (in which animal it is easily accomplished) produces a stupor resembling sleep, in which all *voluntary* movement ceases. Flourens has noticed that a removal of the cerebrum in thin slices tends toward a gradual loss of mental power. Animals so mutilated are capable, however, of movements of a *reflex character* when any of the organs of sense are subjected to stimulation; but they are so regular in the order of their occurrence that they may be predicted, thus proving that they are not the result of volition on the part of the bird itself. Foster, in his work on physiology, gives an interesting and concise account and summary of similar experi-

ments made upon other animals. As most observers, however, have arrived at about the same conclusions, it is unnecessary to enter into detail here as to the results of the experiments made by each.

Now, from what has been already stated in this and a previous article, we can construct a general scheme of the nervous system as follows:

1. The *central gray matter of the spinal cord*, which has no connection with the higher senses, but which is capable, in itself, of the simplest kinds of reflex acts, by means of the spinal nerves. These can be produced, at the will of the experimenter, in the beheaded frog, when an irritation of the skin by any acid, etc., is created; and Robin has satisfactorily performed the same experiment upon a beheaded criminal. We have reason to believe that the spinal cord can be slowly and often painfully taught to perform certain series of muscular movements (as in playing scales upon a musical instrument, for example), in a purely automatic way, without any intervention of the higher ganglia.

2. The *basal ganglia*, and possibly the *cerebellum*, which are of a higher order, in point of construction, than the spinal gray matter, since they are connected indirectly with all the nerves of the spinal cord, and, in addition, with those of the special senses. These are capable, in themselves, of executing more complex actions, besides those of a purely reflex type, in obedience to impressions received from the nerves of special sense, as well as from the spinal nerves. These ganglia are probably important agents in guiding muscular movements in response to visual impressions and those from the sense of hearing; and, in this way, they seem to have an important control over the maintenance of equilibrium (co-ordinated movement).

3. The *cerebral cortex*, a ganglion of the highest order, in which the mental activities are seated, in addition to the function of elaborating and storing of sensory impressions of all kinds, and transforming them, at the proper time, into appropriate motor impulses. Here we encounter the mysterious realms where the living forces of our psychic activities are marshaled and organized, where volition has its seat, giving to the physical organization its individuality, and where those eternal problems respecting the relations of our corporeal and mental being are solved and carried into execution.

TOPOGRAPHY OF THE CEREBRAL CORTEX.—We are indebted to the admirable monograph of Ecker for a systematic grouping of the convolutions, or "gyri," which will materially assist us in studying the peculiarities of formation of each, and especially in defining special centers whose functions seem to have been determined by experimental physiology. The terms employed by this author and some of his predecessors are now em-

bodied in most of the recent works on physiology and descriptive anatomy, although there are *structural grounds* (pointed out by Meynert) which make them appear somewhat illogical. We may simplify the study of this subject by first enumerating four lobes, four lobules, and "four sulci," or fissures, which are especially prominent upon the exterior surface of the cerebrum. These are as follows:

THE FOUR LOBES ARE:	{ The frontal lobe. { The parietal lobe. { The temporo-sphenoidal lobe. { The occipital lobe.
THE FOUR LOBULES ARE:	{ The lobulus centralis (the island of Reil). { The lobulus paracentralis. { The lobulus cuneus. { The lobulus quadratus.
THE FOUR SULCI ARE:	{ Ascending limb of the fissure of Sylvius. { Horizontal limb of the fissure of Sylvius. { The fissure of Rolando. { The external parieto-occipital fissure.

The LOBES are designated by the bones with which they bear relation; hence their names will serve to indicate their situation and extent. The main sulci, or fissures, are the dividing lines between the lobes; the smaller sulci seen in the diagram separate the different convolutions, or "gyri."

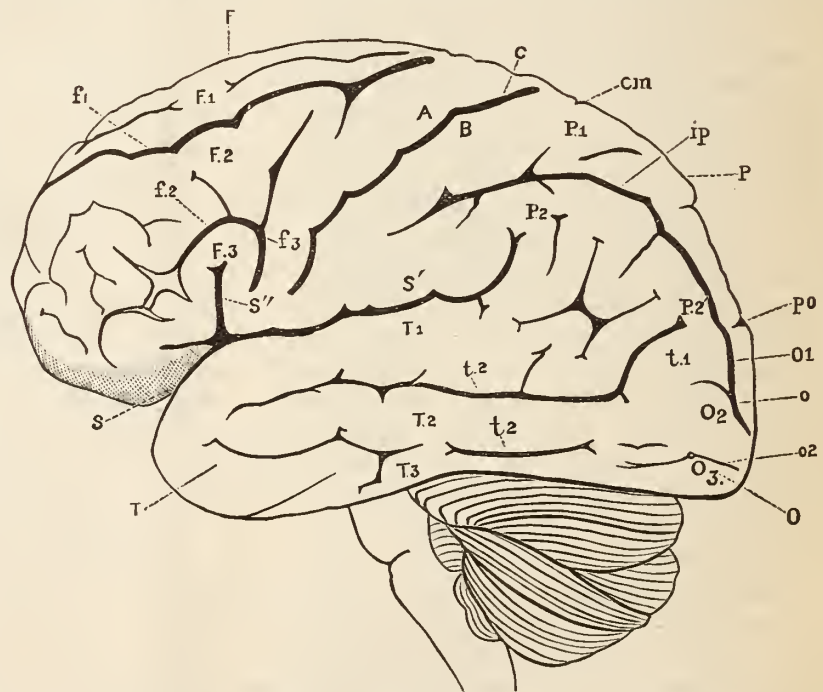


FIG. 5.—LATERAL VIEW OF THE HUMAN BRAIN, SHOWING ITS LOBES AND FISSURES. (After Ferrier.)

F, frontal lobe; P, parietal lobe; O, occipital lobe; T, temporo-sphenoidal lobe; S, fissure of Sylvius; S', horizontal portion of the same; c, sulcus centralis or fissure of Rolando; A, anterior central convolution or ascending frontal; B, posterior central convolution or ascending parietal; F₁, superior; F₂, middle; F₃, inferior frontal convolution; f₁, superior; f₂, inferior frontal sulcus; f₃, sulcus precentralis; P₁, superior parietal lobule, or postero-parietal lobule; P₂, inferior parietal lobule, viz.: P₂, gyrus supra-marginalis; P₂', gyrus angularis; p, sulcus intra-parietalis; c, m, termination of the calloso-marginal fissure; O₁ first, O₂ second, O₃ third occipital convolutions; p_o, parieto-occipital fissure; o, sulcus occipitalis transversus; o₂, sulcus occipitalis longitudinalis inferior; T₁ first, T₂ second, T₃ third temporo-sphenoidal convolutions; t₁ first, t₂ second temporo-sphenoidal fissures.

Upon the internal surface of the cerebrum, hidden from view by the contact of the hemispheres unless they be pulled apart, are three additional fissures, which have been designated as the "calloso-marginal," the "internal parieto-

occipital," and the "calcarine." These will be seen in the plate now indicated (see Fig. 8).

The **FRONTAL LOBE** (F in Fig. 8) is contained within the anterior fossa of the skull. It presents four "gyri," which are specially named. These are as follows:

The *ascending frontal convolution*, or *gyrus* (A), which lies anterior to the fissure of Rolando, being separated from the ascending parietal convolution by that fissure.

The *superior frontal convolution*, or *gyrus* (F₁), which joins the ascending gyrus, passing transversely across the frontal lobe.

The *middle frontal convolution*, or *gyrus* (F₂), passing parallel to the superior.

The *inferior frontal convolution*, or *gyrus* (F₃), lying below the middle, embracing the ascending limb of the fissure of Sylvius.

Benedikt has observed the frequent occurrence of a *fourth frontal convolution* in the brains of criminals. It was found to exist, more or less completely developed, in the majority of brains of this class to which he had obtained access. It originated usually by a bifurcation of the middle frontal convolution, occasionally by a bifurcation of the superior frontal convolution. Other points of interest are presented, including the occurrence of a *fifth convolution*. These facts the author regards as the expression of a great pathological law, that atypical structure is the chief agent in the production of atypical (morbid) performance of function.

The **PARIETAL LOBE** (P) has also four convolutions, or gyri, called the ascending, the supra-marginal, the parietal lobule, and the angular gyrus.

The *ascending parietal convolution* (B) lies back of the fissure of Rolando, being separated from the ascending frontal convolution by means of that fissure.

The *supra-marginal convolution* (P₁), the *parietal lobule* (P₂), and the *angular gyrus* (P₃), being the other three convolutions of the parietal lobe, are situated behind the ascending parietal convolution.

The **TEMPORO-SPHENOIDAL LOBE** (T) presents three well-marked convolutions, which run in an antero-posterior direction. They are named as follows:

The *superior temporo-sphenoidal convolution* (T₁), which lies below the horizontal limb of the Sylvian fissure, and which is continuous behind with the parietal lobe.

The *middle temporo-sphenoidal convolution* (T₂), which becomes continuous with the angular gyrus, and is connected to the middle occipital convolution.

The *inferior temporo-sphenoidal convolution* (T₃), seen on the under surface of the cerebrum, and connected with the third occipital convolution.

The **OCCIPITAL LOBE** (O) presents three badly defined convolutions, which are superimposed upon each other,

and which lie in a more or less antero-posterior direction.

The *superior occipital convolution* (O₁) is connected with the parietal lobule.

The *middle occipital convolution* (O₂) is connected with the angular gyrus, and also with the middle temporo-sphenoidal convolution.

The *inferior occipital convolution* (O₃) is connected with the inferior temporo-sphenoidal convolution.

The admirable diagram (Fig. 6) to which I now call your attention shows the relative position of the gyri, as well as their extent, configuration, and lines of continuation into neighboring convolutions. While it is more schematic than that of Ferrier, it is better adapted for the purposes of instruction. In its general outline, however, it resembles the brain of the monkey, rather than of man, as the frontal lobes are small, and the fissure of Rolando somewhat far forward.

The **LOBULES** of the cerebrum demand individual men-



FIG. 6.—A DIAGRAMMATIC FIGURE, SHOWING THE CEREBRAL CONVOLUTIONS. (Dalton.)

S, Fissure of Sylvius, with its two branches *a* and *b*, *b*; R, fissure of Rolando; P, parieto-occipital fissure; 1, 1, 1, the first or superior frontal convolution; 2, 2, 2, the second or middle frontal convolution; 3, 3, 3, the third frontal convolution, curving around the ascending limb of the fissure of Sylvius (*center of speech*); 4, 4, 4, ascending frontal (anterior central) convolution; 5, 5, 5, ascending parietal (posterior central) convolution; 6, 6, 6, supra-Sylvian convolution (parietal lobule), which is continuous with 7, 7, 7, the first or superior temporal convolution; 8, 8, 8, the angular convolution (or gyrus), the probable *center of vision*, which becomes continuous with 9, 9, 9, the middle temporal convolution; 10, the third or inferior temporal convolution; 11, 11, the superior parietal (supra-marginal) convolution; 12, 12, 12, the superior, middle, and inferior occipital convolutions (called also the first, second, and third). It is to be remembered that the term "gyrus" is synonymous with "convolution," and that both terms are often interchanged.

tion. One of them (the lobulus centralis) lies at the base of the frontal lobe; the other three are found upon the internal surface of the cerebrum.

The *lobulus centralis*, or "*island of Reil*" (*insula*), lies deeply situated in the commencement of the fissure of Sylvius. It can be made visible only by the separation of the lips of that fissure or the lifting of the operculum (see Fig. 7); hence it lies in intimate relation with the "basal gan-

glia." It is a triangular eminence, and consists of five or six straight convolutions (*gyri operi*), which radiate outward from a point just external to the anterior perforated space. It covers the lenticular nucleus of the corpus striatum.* The drawing to which I now call attention shows the appearance of this lobule after the end of the temporo-sphenoidal lobe has been removed. The discovery of Broca that this lobule contains the center of speech (a statement which clinical experience has not yet been able to overthrow) has given it a clinical and physiological importance in excess of other convolutions.

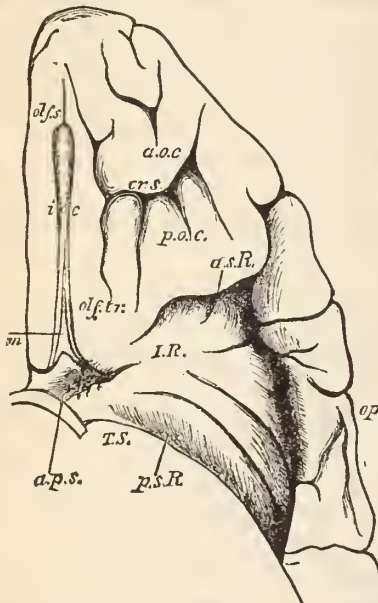


FIG. 7.—ORBITAL SURFACE OF THE FRONTAL LOBE AND ISLAND OF REIL. (Turner.)

The Island of Reil is exposed by removal of the tip of the temporo-sphenoidal lobe; *T. S.*, cut edge of this lobe; *a. p. s.*, anterior perforated space; *a. s. R.*, *p. s. R.*, anterior and posterior limiting sulci of the island; *op.*, operculum; *tr. s.*, tri-radiate sulcus; *i. o. c.*, *a. o. c.*, and *p. o. c.*, internal, anterior, and posterior orbital convolutions; *olf. s.*, end of olfactory sulcus; *olf. tr.*, olfactory tract, bifurcating into the inner and outer roots; *m.*, middle root, or tuber olfactorium.

The *paracentral lobule* (P in Fig. 8) is found on the internal surface of the cerebrum, in front of the lobulus cuneus. There is clinical evidence to sustain the belief that this lobule is, in some way, connected with the motor tract. We know also that disease of this convolution produces a secondary degeneration of nerve-fibers which can be traced through the cerebrum along the motor tract and into the motor regions of the spinal cord. The "giant cells" of Betz are also found in its cortical layer.

The *lobulus quadratus* (Q) lies between the paracentral lobule and the lobulus cuneus, as shown in this drawing (Fig. 8). It is bounded by the internal parieto-occipital and the callosal-marginal fissures.

The *lobulus cuneus* (C) lies posteriorly to the lobulus quadratus. Like the preceding lobule, it is inclosed between two fissures, the internal parieto-occipital and the calcarine.

PEDUNCULAR FIBERS OF THE CEREBRUM.—By means of the peduncular or radiating fibers of the cerebrum, the cor-

tex is enabled to receive impressions of the external world and to transmit motor impulses to the muscles. The larger

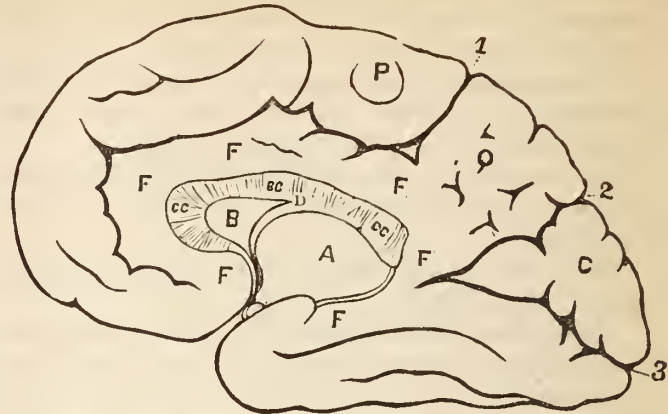


FIG. 8.—A DIAGRAM OF THE CEREBRUM IN LONGITUDINAL MEDIAN SECTION (Dalton.)

1, callosal-marginal fissure; 2, parieto-occipital fissure; 3, calcarine fissure; A, third ventricle; B, fifth ventricle; D, anterior crura of fornix; C, cuneus (occipital lobule); Q, *præunens* (lobulus quadratus); P, paracentral lobule; C C, corpus callosum; F, gyrus fornicatus.

part of these fibers (as stated in a previous article) are capable of being traced into the crus and spinal cord, but it must be remembered that some also are intimately con-

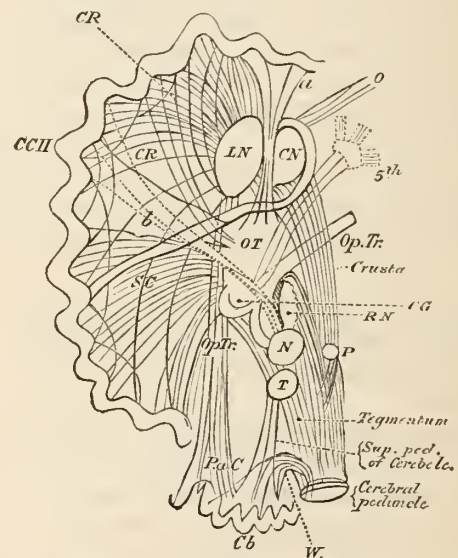


FIG. 9.—A DIAGRAM OF THE FIBERS OF A LATERAL HALF OF THE CEREBRUM. (Foster's "Physiology," Reichert's edition.)

CCH, cortex of the cerebral hemisphere, the convolutions of which are seen to be connected by arcuate connecting fibers; Cb, cortex of cerebellum; CR, corona radiata, consisting of fibers extending from the cortex cerebri to LN and CN, the "lenticular" and "caudate" nuclei of the corpus striatum, and to OT, the optic thalamus. The posterior extremity of the optic thalamus presents two enlargements, the "corpus geniculatum externum" and "internum," which are seen to be connected with the optic tracts. The letters Op. Tr. are placed on a band of fibers that are believed to run directly from the cortex cerebri to the cortex cerebelli. SC, "stria cornea," or "tænia semicircularis"; RN, "red nucleus of the tegmentum"; N, "nates"; T, "testis"; P, "pineal gland"; b, fibers passing directly into the tegmentum from the cortex cerebri; PaC, the band of fibers to the right of these letters are part of the "superior peduncle of the cerebellum." The olfactory nerve (o), the optic nerve (Op. Tr.), and the trigeminal or fifth nerve, are also shown to possess an intimate connection with the basal ganglia and probably with the cortex cerebri. A special band of fibers (Op. Tr.) are supposed to run from the cortex cerebri to the cerebellum.

* The applied anatomy of this ganglion has been presented in a late article by the author. See "Journal of Mental and Nervous Disease," February, 1883.

nected with the cranial nerves, especially those associated with the special senses of smell, sight, and audition. In

a previous article (published in this journal, March 19, 1883), the course of these fibers was considered at some length, and a diagram was given to assist in mastering the more difficult points referred to; still it may not be considered a repetition to introduce at this time another diagram, which will make some additions to the facts already recorded.

Many points shown in this diagram are already familiar to you, but a few remain which deserve mention. One bundle, the "stria cornea," is shown in the drawing. These fibers run from the cortex of the temporal lobe of the cerebrum to the caudate nucleus of the corpus striatum, and appear on the floor of the lateral ventricle as a curved band, the "tænia semicircularis." The optic thalamus receives fibers which spring from the frontal lobe, passing between the caudate and lenticular nuclei of the corpus striatum, and designated in the diagram as (a); also fibers from the temporal lobe, the walls of the fissure of Sylvius, the gyrus fornicatus, and the optic tracts. The so-called "geniculate bodies" are also shown to be connected with certain bundles of radiating fibers. The bundles which compose the "crusta" and "tegmen cruris" are made more apparent than in the diagram previously drawn. Finally, the fibers connecting the cortex of the cerebellum with the testis are clearly depicted.

(To be continued.)

Book Notices.

Manual of Gynecology. By D. BERRY HART, M. D., F. R. C. P. E., Lecturer on Midwifery and Diseases of Women, School of Medicine, Edinburgh, etc., and A. H. BARBOUR, M. A., B. Sc., M. B., Assistant to the Professor of Midwifery, University of Edinburgh, etc. Volume I. With eight plates and one hundred and ninety-two wood-cuts. Pp. xviii-313. Volume II. With one lithograph and two hundred and ten wood-cuts. Pp. xiii-366. New York: William Wood & Co., 1883. [Wood's Library of Standard Medical Authors.]

It is not very long since the Edinburgh edition of Hart and Barbour's work was noticed at some length in this journal. We can only repeat the favorable expressions we then made use of. In spite of the American prejudice against text-books in more than one volume, we think the reader will find the Messrs. Wood's edition a very pleasant form of the book, and we can not doubt that the subscribers to the series of which it forms a part will be pleased that it has been brought out in this form.

Diagnosis of Ovarian Cysts by Means of the Examination of their Contents. By HENRY JACQUES GARRIGUES, A. M., M. D., Obstetric Surgeon to the Maternity Hospital, etc. New York: William Wood & Co., 1882. Pp. iv-112.

This is the essay which was published in serial form in the "American Journal of Obstetrics." It has evidently cost its author a good deal of pains, and we trust that its appearance in the shape of a book will secure for it a wider circle of readers than it would otherwise have had. Our own readers have been informed of the substance of Dr. Garrigues's views on the subject with which it deals, as set forth by him in the proceedings

of the American Gynaecological Society and the New York Obstetrical Society. An analysis of the work is therefore not called for at present.

BOOKS AND PAMPHLETS RECEIVED.

An Encyclopædic Index of Medicine and Surgery. Edited by Edward J. Bermingham, A. M., M. D. New York: Bermingham & Co., 1882. Pp. 934. [Price, cloth, \$5; sheep, \$6.]

Insanity: its Classification, Diagnosis, and Treatment. A Manual for Students and Practitioners of Medicine. By E. C. Spitzka, M. D., Professor of Medical Jurisprudence and of the Anatomy and Physiology of the Nervous System at the New York Post-graduate School of Medicine, etc. New York: Bermingham & Co., 1883. Pp. 415. [Price, \$3.]

The Diagnosis and Treatment of Diseases of the Ear. By Oren D. Pomeroy, M. D., Surgeon to the Manhattan Eye and Ear Hospital, etc. With one hundred illustrations. New York: Bermingham & Co., 1883. Pp. 392. [Price, \$3.]

The Pathology, Diagnosis, and Treatment of the Diseases of Women. By Graily Hewitt, M. D. Lond., F. R. C. P., Professor of Midwifery and Diseases of Women, University College, etc. A new American, from the Fourth Revised and Enlarged London Edition. With 236 illustrations. Edited, with Notes and Additions, by Harry Marion-Sims, M. D., Attending Surgeon to St. Elizabeth's Hospital, etc. New York: Bermingham & Co., 1883. 2 vols. Pp. 469, 561. [Price, \$2.25 each volume.]

Practical Clinical Lessons on Syphilis and the Genito-urinary Diseases. By Fessenden N. Otis, M. D., Clinical Professor of Genito-urinary Diseases in the College of Physicians and Surgeons, etc. New York: Bermingham & Co., 1883. Pp. 584. [Price, \$4.50.]

A Practical Manual of the Diseases of Children, with a Formulary. By Edward Ellis, M. D., Late Senior Physician to the Victoria Hospital for Sick Children, etc. Fourth edition, revised and enlarged. New York: Bermingham & Co., 1882. Pp. 218. [Price, \$1.]

Annual Announcement of the Medical Department of Niagara University. Session of 1883-'84.

Correspondence.

LETTER FROM BOSTON.

The Boston Dispensary and its New Building.

Boston, September 25, 1883.

IN addition to the new Children's Hospital, the new building of the Harvard Medical School, the new Out-Patient Department, and the new Home for Nurses connected with the Massachusetts General Hospital, all of which have been spoken of in the journal, we have had two other buildings that belong to those devoted to medical charity or education. I refer to that of the Boston Dispensary, and to the Veterinary Hospital—making in all six new buildings which have been erected within a year, costing in the aggregate half a million of dollars.

Before describing the dispensary building, let me give an account of the institution. The Boston Dispensary is one of the oldest institutions of its kind in the country, having been organized in 1796, ten years later than the Philadelphia Dispensary, and six years later than the New York Dispensary. The exact date of its organization is not known, but it was early in September, for the first records read that "the meeting was adjourned to Wednesday next (September 11th), at 5 P. M." At the preliminary meeting John Sullivan, Esq., presided, and Dr.

Oliver Smith and William Tudor, Esq., were appointed a committee to report regulations for the institution. The expenses were to be defrayed by subscriptions, the first code of by-laws providing that each lady or gentleman who paid five dollars annually into the hands of the treasurer should be entitled to have the privilege of having two patients at one time under the care of the dispensary; and the sum of fifty dollars entitled the donor to the privilege of having two patients in the dispensary during life. At the start, a centrally located apothecary's shop was selected as headquarters, and here the patients came, orders were left, and the medicines given out. From the history of the dispensary we find that a "Mr. Bartlett, apothecary, was requested to procure a board, to be placed at the front of his shop, with the words *The Boston Dispensary* painted thereon, with such other device as may be congenial to the institution, and corresponding with his ideas and fancy." The sign selected was "The Good Samaritan," which since then has always been the symbol of the dispensary, and is prominent over the door of the new building. In the report for 1858 is the following: "Tradition says that the artist, in his anxiety to illustrate the full import of the scene described in Luke, x, 32, painted the Levite in the act of passing by on the other side. When the work was finished, the managers detected in the Levite so striking a likeness to a certain clergyman of the town that the figure was effaced."

The first rules of the managers allowed any regular physician to draw orders for medicine upon the apothecary selected; but, after a while, the city was divided into districts, the size and number of the districts being changed according as the work increased; and with the growth of the city more apothecaries were selected, so that the work could be more easily accomplished.

In the early days applicants for aid had to obtain an order from a member or subscriber before the desired help could be furnished. When the central office was established, in 1856, this custom was done away with. In 1806 the managers allowed wine to be given to any patient who might absolutely need it. This custom was continued till 1818, at which time it was discontinued on account of a report made by Dr. John Ware, one of the physicians, who said that he had given out one hundred and thirty orders for a quart each, mostly to consumptives and old persons; for the rest, "not one quart was necessary for the recovery of patients," and he recommended that the custom be discontinued. On February 26, 1801, the act of incorporation was obtained, the institution, through its managers, being allowed to hold real estate, provided that the interest from this and its personal property should not exceed five thousand dollars.

On January 20, 1852, an act was added enabling it to hold five thousand more, and on February 12, 1859, it was allowed to hold double the amount mentioned under the former acts. In 1809, the expenses having greatly increased, and new subscribers not coming in in the same ratio as before, a committee was appointed to prepare and put in circulation a subscription paper in order to increase the funds. The yearly fund was in this manner increased one thousand nine hundred and ninety dollars, and the permanent fund four hundred and ten dollars; and, in addition, various sums were raised at different times by other means; and we find that, on February 21, 1821, Mr. Kean appeared as King Lear at the Boston Theatre, for the benefit of the funds of the dispensary, five hundred and fifty dollars being realized; and later on, in 1823, three hundred and twenty dollars were raised from an exhibition of an Egyptian mummy. This curiosity is now in the possession of the Massachusetts General Hospital, and I believe was the first one ever brought to this country. Bathing facilities must have been few at that time, for on July 12, 1821, the managers voted that, "on applica-

tion of Dr. Chandler Robbins, Jr., a bathing-tub be purchased and deposited in some central place for the use of patients of the dispensary." The work of the dispensary having so increased, and the need of such an institution having been demonstrated, and, in fact, recognized by numerous bequests, an appeal was made to the public, and, as a result of this appeal, the land where the present building stands was bought. There were two brick houses on it, and it was the intention of the managers to use one for a dispensary and one for a hospital, but both were used for the former—and it was here that the first permanent quarters of the dispensary were established. To quote from a circular issued at that time: "The estate is open on all sides to the light and air; it is almost the exact geographical center of the city; and seems to be in every way a most favorable situation for commencing operations under the new organization." [The manner in which the organization was carried out was described in the journal for January 6, 1883, pp. 12 *et seq.*]

This, then, was the first home of the dispensary, and the words of that circular are as applicable to-day, for the new building is built upon the same site, and the institution will begin its eighty-eighth year with greater facilities and with new life.

The new building will be ready for occupancy about October 1st. It is situated on the site of the old building, at the corner of Ash and South Bennet Streets. The plan of the building is very nearly square, the dimensions being 65' 8" x 65' 4", with an entrance porch and bay on Ash Street 6' 0" x 24' 6". The building contains a basement, first and second stories, and a commodious attic in the roof. The only finished portion in the basement is a laboratory, 25' 0" x 40' 0", fitted up with all the requisites for the compounding of medicines, the remaining space being devoted to a storeroom for the laboratory, fuel bins, and furnaces. The first story contains a hall 22' 0" wide, which runs the entire length of the building, on one side of which are the dispensary proper (with a separate staircase to the laboratory below, and a special entrance from South Bennet Street), trustees' room, laboratories, and one consulting-room, and the other side is divided into five consulting-rooms for the attending physicians. The second story contains a hall of similar dimensions to the one on the first story, with an ample and attractive staircase leading thereto, with operating-, lecture-, and consulting-rooms, laboratories, etc., on one side, and five consulting-rooms for the physicians on the other.

The attic contains the janitor's quarters (consisting of five rooms and bath-room), and a large unfinished apartment which can be used for storage, etc. The building is heated by two furnaces, in addition to which each room is provided with an open fireplace. The finish throughout is of ash, with floors of the best hard Southern pine. Soapstone sinks, with hot and cold water, are placed in every room, and the plumbing throughout is in accordance with the most approved sanitary rules. In point of construction, the building is second to none in Boston, great care having been taken to make it substantial and durable. The plaster work is applied directly on the brick walls, which are hollow, and the halls and rooms are well lighted by generous windows.

Ash settees, designed expressly for this building, are to be provided for the halls for waiting patients, and are to be so arranged that patients for each particular room will be seated facing and in close proximity to it. The walls of the building are of brick, with brown sandstone trimmings, surmounted by a slated hipped roof with a gable on each corner. The chimneys have been so treated as to make an attractive feature of the design, and the whole presents an appearance both original and unique.

THE
NEW YORK MEDICAL JOURNAL,
A Weekly Review of Medicine.

Published by
D. APPLETON & Co.

Edited by
FRANK P. FOSTER, M. D.

NEW YORK, SATURDAY, SEPT. 29, 1883.

THE PREVALENCE OF TYPHOID FEVER IN NEW YORK.

Thus far in the current year the death rate of New York has been decidedly lower than usual, and there is abundant reason to hope that the record of the year will be completed without any noteworthy impairment of this gratifying state of things. As we stated some months ago would probably be the case, the cholera has not reached us; there is not time enough now before cold weather sets in for yellow fever to change the figures materially, even if there were much of a chance of its eluding the vigilance of our sanitary officials; scarlet fever and diphtheria can scarcely be expected to burst upon us in such sudden severity as to counteract the gain already made; and no city in the world is better prepared than New York for the speedy extinction of an epidemic of small-pox, of which indeed there is now not the slightest sign. The year is reasonably sure, then, to count as one of notably low mortality. No doubt the exceptionally cool summer now drawing to a close is to be credited in very great measure with this satisfactory showing, but it should not be forgotten that our Board of Health has, as usual, taken most praiseworthy precautions, and is fairly entitled to be taken into account in the summing up.

While, however, the favorable record we have spoken of is not likely to be reversed, there is danger of its being marred by the increasing prevalence of typhoid fever. It is seldom, to be sure, that an autumn passes without a considerable number of cases of this disease being met with among us, but this year the outbreak seems rather more threatening than usual. Typhoid fever is not one of the very deadly diseases, and it would be unwarrantable in the highest degree to expect it ever to take on the character of a pestilence in this community, but it is often the agencies that are not very terrible that slowly and silently work an amount of harm which proves great in the aggregate. Not only from this consideration, but because the disease in question is among the more easily preventable of all the zymotic affections, it is a pity that the utmost should not be done to limit its spread. We are convinced, by recent reports made public by the Sanitary Superintendent, Dr. Day, that individual members of the profession might do much more than they are now doing to aid the Board of Health in the work of stamping out the disease—and chiefly in the way of advising and enforcing disinfection of the excretions in cases of typhoid fever.

There are many gaps in our knowledge of ætiology, and perhaps in few ways is this fact more forcibly if not strikingly shown than by the gradual renunciation that seems to be taking place of the general impression that contamination of the ingesta, and especially of the drinking-water, is practically the one and only channel of typhoid-fever infection. That the con-

tagium may effect a lodgment in the system by way of the air passages, is, if we mistake not, coming more and more to be recognized. It is a legitimate corollary that the disinfection to which we have referred should be carried out promptly. Possibly there is little call for more stress in this direction among the well-to-do, but the case is different with the poor. We are aware that those of our own colleagues whose practice lies mostly in the tenement-house districts are overworked and miserably underpaid, but we feel sure that they need only be reminded of the gain to be effected by their giving a little stricter attention to enforcing the prompt disinfection of typhoid-fever excreta to lead them to co-operate in this matter most heartily with the well-directed efforts of the Board of Health. The board's circulars giving directions as to the best means of accomplishing such disinfection are explicit and simple, and certainly deserve to be followed by every practitioner.

THE INTERPRETATION OF COLLES'S LAW.

An interesting controversy on this subject has recently taken place between Behrend, of Berlin, on the one hand, and Diday and Doyon, of Lyons, on the other. The former, in a paper on "Inherited Syphilis," had held that the placenta might act either as the medium of infection between the mother and the fœtus, or as a barrier to such infection. Believing, therefore, that a healthy woman might give birth to a syphilitic child, he maintained that the mother would not necessarily escape infection from suckling her infant.

Regarding these propositions as in conflict with Colles's law, Diday and Doyon made them the subject of criticism in an article published in the "Annales de dermatologie et de syphiligraphie," in the fifth number for last year. In the February number of this year the controversy is continued by Behrend, in an article entitled "*La soi-disant loi de Colles est-elle une loi ou non?*" His Lyonnese antagonists follow with another, entitled "*La lettre et l'esprit de la loi de Colles.*"

Behrend seeks to establish the following propositions: 1. That the thesis commonly called Colles's law is derived from a dogma of Colles's that has been interpreted incorrectly and amplified arbitrarily in the course of years. 2. That this law, as formulated by modern authors, is based upon a fallacy in logic, because deduced from a negative premise. 3. That, in the form given to it, the law is contradicted by direct clinical observations, since it has been established that a woman may contract syphilis by nursing a child that has inherited the disease from its father.

Behrend maintains that there is nothing in Colles's original proposition inconsistent with the assumption that the mother's immunity is acquired by prior infection, and he believes that that is the only way in which it could be acquired. Colles's words are: "It is a curious fact that I have never witnessed nor ever heard of an instance in which a child deriving the infection of syphilis from its parents has caused an ulceration in the breast of its mother." ("Practical Observations on Venereal Disease," London, 1837.) This statement, Behrend asserts, was afterward modified by Beaumès as follows: "A mother,

having borne a syphilitic child which *owes its infection to the semen of the father*, does not generally contract the disease in nursing her child, though a strange nurse may do so." Diday afterward mingled these two propositions in the following formula, which has since been generally adopted and known as "Colles's law": "A syphilitic child, whether inheriting the disease *from the father or from the mother*, does not infect the mother suckling it." Behrend's objection to this statement is, that it rests wholly upon negative evidence, and can stand only so long as there are no conclusive observations to the contrary. But, he maintains, there are three cases on record in which the mothers were infected from syphilitic children that inherited the disease from the fathers. They were reported by Ranke, Guibout, and Cazenave, and Behrend regards them as outweighing all the negative evidence that can be produced on the other side. In conclusion, he deprecates the advice, commonly given as a sort of "moral" to Colles's law, that the mother of a syphilitic child should always nurse it herself.

It seems clear to us that it was no part of Colles's intention to give an opinion as to how the mother's immunity was acquired; he merely recorded his experience. Had he been convinced, as Behrend is, that the mother's immunity was due to her having contracted the disease before the child's birth, he would doubtless have said so distinctly. There is perhaps a presumption that he had such an idea, from the remarks he makes about a case that at first seemed an exception to the rule. An infant a few months old suddenly showed signs of syphilis. At about the same time the mother's nipple became sore, and syphilis followed. Colles argued that the child had not inherited the disease, but had probably been infected by a woman whom the mother had allowed to suckle it, "because," he says, "as yet I have not seen any instance in which an infant *infected by the mother* communicated a venereal ulcer of the nipple to her."

The prior infection theory may be the true explanation of Colles's law, and in that case Colles's original formula would be much nearer the truth than any of its modifications. The strict correctness of the term *law* in this connection is certainly questionable, although the fact designated by it seems almost invariable. The three exceptions cited by Behrend, to two of which, by the way, Diday and Doyon offer grave objections, make but a poor show in the face of almost unlimited testimony on the other side.

MINOR PARAGRAPHS.

THE COUNTY SOCIETY NOMINATIONS.

THE most adroit move yet made in the code fight was made by Dr. Flint, Jr., last Monday night, when he placed so strong a nominee as Dr. Thomas squarely on the old-code platform. The result will be that Dr. Thomas's election, if it takes place, will be sure to count as a victory for the party, however convinced we may all be that it is really due to his immense personal popularity.

THE ACADEMY OF MEDICINE.

THE President of the Academy, Dr. Fordyce Barker, has issued a circular to the Fellows, the effect of which, it is hoped,

will be to take the vexatious question of ethics out of the Academy, by leading to the adoption of certain amendments of the constitution and by-laws which will be offered at the meeting next week. In his circular the President says: "The Academy of Medicine is not fulfilling its mission when it is engaged in warm discussions of questions of casuistry, in polemical controversies, or in medical politics."

THE ERIE COUNTY MEDICAL BILL.

WE are glad to learn that the committee in charge of the medical bill proposed by the Medical Society of the County of Erie, the full text of which we published in our last issue, have modified their plan for a *pro rata* representation of the sects in the State examining board. The proposition now is, as we understand, to arrange the representation in the proportion of six non-sectarians, two homeopathists, and one eclectic.

OUR STUDENTS' NUMBER.

THE "Maryland Medical Journal" remarks that we might have credited Baltimore with four colleges instead of two, and we have received communications from the officials of several medical colleges, some of whom intimate that their institutions were omitted from our list by design. We would refer these gentlemen to the following sentence in the introductory paragraph of the Students' Number: "The list includes all the non-sectarian colleges recognized by the Illinois State Board of Health *that we have been able to obtain trustworthy data from.*"

A NEW MATERIAL FOR THE OBSTETRICAL FORCEPS.

AN incident has lately come to our knowledge that hardly seems likely to strengthen the esteem in which some of our practitioners hold instruments of foreign make. A stock of instruments having been damaged by water, with which they were drenched on the occasion of the shop having taken fire, many of them were found to need polishing. Among them was an obstetrical forceps that proved, on removing the nickel plating, to be made of brass. It was one of a lot that had been obtained some years ago from a Sheffield maker. Cast brass is much cheaper than forged steel, and we must certainly credit the Sheffield instrument-maker with being as "smart and knowing" as the Burgomaster in "The Czar and Carpenter."

YELLOW FEVER AND CREMATION.

A RECENT number of the "Kölnische Zeitung" cites certain investigations by Dr. Domingues Freire, a Brazilian chemist, who professes to have discovered that the blood of yellow-fever patients contains a parasite which continues to live, in one shape or another, even after the victim's death. He therefore recommends cremation of the bodies of persons who have died of the disease. By means of experiments, he shows that the injection of a few drops of blood thus infected into the veins of a rabbit causes the animal's death within fifteen minutes. Although this result might be thought to be due to simple blood poisoning, it is noteworthy that the blood of a rabbit thus killed is found to be filled with the same parasite.

NEWS ITEMS.

INFECTIOUS DISEASES IN NEW YORK.—We are indebted to the Sanitary Bureau of the Health Department for the following statement of cases and deaths reported during the two weeks ending September 25, 1883:

DISEASES.	Week ending Sept. 18.		Week ending Sept. 25.	
	Cases.	Deaths.	Cases.	Deaths.
Typhoid fever.....	69	13	84	12
Scarlet fever.....	38	14	29	2
Cerebro-spinal meningitis....	3	3	7	5
Measles.....	22	2	4	2
Diphtheria.....	19	14	17	12

YELLOW FEVER.—On Thursday of last week a dispatch was received at the Navy Department announcing that there were then no cases among the naval forces, but that ten civilians were under treatment, all but two being children. On Saturday one death was reported from Warrington. On Sunday two new cases were reported from the same place, both in children.

CHOLERA.—Up to the 26th of August the epidemic in Egypt had caused 26,579 deaths, of which 1,615 took place during the last week of that period. The European powers are reported to have agreed upon a conference at Rome to arrange an international sanitary code.

THE LATE DR. BEVERLEY LIVINGSTON.—The Medical Board of the Nursery and Child's Hospital has adopted the following resolutions:

Whereas, The Medical Board of the Nursery and Child's Hospital receives with deep sorrow the announcement of the death of Dr. Beverley Livingston, at the beginning of what promised to be an association of unusual usefulness to the institution,

Resolved, That we, his associates, hold in greatest esteem our remembrance of the life and character of our friend, and desire to record our appreciation of his high attainments and skill as a physician, coming as they did from an ardent devotion to his selected life work, and our knowledge of his noble and elevated mind and of his generous companionship.

Resolved, That we see in the melancholy event of his death that our institution, the profession, and the community are deprived of the influence and example of a pure, true, and earnest life.

Resolved, That we tender to the family of our late associate our heartfelt sympathy in their bereavement, and that these resolutions be published in the medical journals of the city.

GEORGE G. WHEELLOCK,

EDWARD L. PARTRIDGE,

Committee.

DEATH OF A MEDICAL STUDENT FROM MORPHINE.—Mr. Joseph W. Pilkington, Jr., of Sedalia, Mo., died in New York last week from the effects of an over-dose of morphine administered by himself. He was a student at the Bellevue Hospital Medical College, and is reported to have considered himself quite insusceptible to the action of opium.

DR. WILLIAM OSLER, OF MONTREAL, says the "Union médicale du Canada," has been made a Fellow of the Royal College of Physicians of London.

PROFESSOR DU BOIS-REYMOND.—The "British Medical Journal" states that the twenty-fifth anniversary of Du Bois-Reymond's appointment to the chair of physiology in the University of Berlin will be celebrated on the 15th of October.

AN HONOR TO M. JACCOUD.—On account of his book on the treatment and curability of pulmonary phthisis, says the "Union médicale," Professor Jaccoud has been made a Commander of the Order of Christ, of Portugal.

THE DEATH OF LOUISE LATEAU, the famous *stigmatisée de Bois d'Haine*, is announced.

THE "PHILADELPHIA MEDICAL TIMES" is to pass under the exclusive editorial control of Dr. Frank Woodbury. Dr. Woodbury is admirably fitted to maintain the high character of the "Times."

THE MEDICO-CHIRURGICAL COLLEGE OF PHILADELPHIA.—Dr. William S. Janney has been elected professor of practical anatomy and clinical surgery in the college. Dr. Janney is the present coroner of the city of Philadelphia, and is well known to the profession as an anatomist and surgeon of extended experience.

THE BELLEVUE HOSPITAL AMBULANCE SERVICE.—The Commissioners of Public Charities and Correction have taken steps to secure the use of the telegraphic facilities of the Police and Fire Departments to improve the system of telegraphing for ambulances.

THE HUNTER'S POINT NUISANCES.—Warrants have been issued by Governor Cleveland ordering the immediate closure of several bone-boiling and rendering establishments at Blissville and Maspeth.

THE MAINE GENERAL HOSPITAL is reported to have received another gift of \$50 from Mrs. Raymond, the singer.

CREMATION IN PHILADELPHIA.—It is reported that the Medical Department of the University of Pennsylvania is about to build a crematory for the destruction of refuse from the dissecting-room, and that the structure will be at the service of those who wish to dispose of bodies by cremation.

A NEW MEDICAL SCHOOL AT BEIRUT is to be established by the French, who have already expended 150,000f. on the building.

THE ADULTERATION OF FRENCH WINES, chiefly with coloring matters, has lately engaged the attention of our consuls in France, one of whom makes the serious statement that the publication of the reports of the municipal laboratory at Paris is to be discontinued at the request of a society of wine-dealers.

AN ANTI-VACCINATION CONGRESS is now in session at Berne, Switzerland.

DOCTORS AND LABORING MEN.—It seems that doctors are not admitted to laboring men's unions, for the reason, as a laboring man lately stated to the Blair committee, that they are "too previous."

Letters to the Editor.

THE APPEAL TO MEDICAL BOOKS IN COURT.

NEW YORK, September 15, 1883.

To the Editor of the New York Medical Journal:

SIR: Having noticed some remarks in a recent issue of your journal on the use in courts of medical books by lawyers in questioning expert witnesses, is my reason for writing this letter, hoping it may aid in calling attention to an evil which ought to cease. The bad features of this method were well illustrated in a recent case in the Supreme Court of Kings County. The counsel was allowed to read questions from a number of authors on insanity to the expert witness, and ask whether he agreed with the author or not. This in itself is not so bad, but it gives opportunity to the lawyer to do what this one did—viz., read so much of a paragraph as suited his purpose, thus often making the author say the opposite to what he intended to say, the Court being thus misled by not knowing the contents of the whole para-

graph, just as atheists select a single passage which suits their case from the Bible and make it look ridiculous by separating it from its proper connection. The rulings of the Court would not permit the expert to relate an instance in his own experience to illustrate a certain point in his testimony, but allowed this counsel to read any number of histories of cases as related by the authors on his table. I am glad to know that in a number of States of the Union medical books are not allowed in court, on account of the pernicious effect on the minds of the judge and jury which a false reading of them by lawyers will produce.

J. H. GIRDNER, M. D.

Proceedings of Societies.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

A STATED meeting was held September 24, 1883, the President, Dr. DAVID WEBSTER, in the chair.

NOMINATIONS OF OFFICERS FOR THE ENSUING YEAR.—After the reading of the minutes, Dr. AUSTIN FLINT, Jr., said that, at the request of several gentlemen, he wished to place in nomination a complete ticket composed of candidates who were known to be uncompromising adherents to the code of ethics of the American Medical Association, and requested that no other nominations be made for officers by any gentleman supporting that side of the question. He then nominated:

For President, Dr. T. GAILLARD THOMAS; for Vice-President, Dr. CHARLES A. LEALE; for Secretary, Dr. E. A. JUDSON; for Assistant Secretary, Dr. P. BRYNBERG PORTER; for Treasurer, Dr. HENRY D. NICOLL; for Censors, Dr. CHARLES McBURNEY, Dr. RICHARD H. DERBY, Dr. CHARLES S. WOOD, Dr. CHARLES HITCHCOCK, and Dr. THOMAS H. BURCHARD.

Dr. F. R. STURGIS placed in nomination for the office of President a man who represented the feeling in favor of sustaining the action of the State Society, of which the county medical societies were only component parts—Dr. S. OAKLEY VAN DER POEL. Nominations made by others were: For Vice-President, Dr. ANDREW H. SMITH; for Secretary, Dr. WESLEY M. CARPENTER; for Assistant Secretary, Dr. CHARLES H. AVERY; for Treasurer, Dr. ORLANDO B. DOUGLAS; for Censors, Dr. F. R. STURGIS, Dr. DAVID WEBSTER, Dr. DANIEL LEWIS, Dr. F. R. S. DRAKE, and Dr. JOSEPH W. HOWE.

Dr. JOHN P. MILHAU nominated for Honorary Membership Brevet Lieutenant-Colonel BENNETT A. CLEMENTS, Surgeon U. S. Army, now on duty in this city.

The paper of the evening was read by Dr. R. E. SWINBURNE, on ADENOID VEGETATIONS OF THE PHARYNGEAL VAULT, AND THEIR RELATION TO MIDDLE-EAR DISEASE.—He first referred to the anatomical peculiarities of these growths, and then spoke of the different morbid changes which the tissues in this region were liable to undergo. After this Dr. Swinburne spoke of the different varieties of treatment which had been resorted to, but more especially the local methods, such as means for their removal, including the galvano-cautery, the wire snare of Jarvis, its modification by Bosworth, and the forceps. In his own practice he had used the forceps with more satisfaction than any of the means enumerated or recommended by others. He exhibited a mouth-gag with a palate retractor, which rendered the use of the forceps easy. He had found this method especially applicable in children, when aided by the use of anæsthetics, which he recommended should always be given.

The paper being open for discussion, Dr. J. P. GARRISH spoke of the beneficial results that might be obtained in these cases by

resorting to constitutional treatment, chiefly with the aid of mild local applications. It was always essential to remove every known cause, and, as cigarette-smoking was a well-known cause of these nasal troubles, he advised that it should be at once restricted.

Dr. F. H. BOSWORTH said the more he saw of throat and nasal diseases the more he was convinced that the proper treatment was *not* by the use of sprays, gargles, washes, etc., but by the employment of such measures as would remove the organic changes which are the cause of these affections. He had operated with very much greater frequency, and with more satisfactory results, on the upper air-passages than on any other part of the respiratory tract. He had not used the forceps very much, and for the reason that he had had some very bad results after employing it. He regarded the wire snare as a much more satisfactory instrument, and he had not found it necessary to give an anæsthetic, except in very small children, when it was used. He thought there was great danger in using the galvano-cautery, on account of the liability to excessive inflammatory reaction.

Dr. HOLBROOK H. CURTIS had seen serious depression follow removal of these growths with either the finger-nail or the forceps. He had reached the conclusion that repeated scarifications of the flat adenoid growths which could not be removed by the snare and spraying with a saturated solution of iodoform in ether, together with constitutional measures, was the most satisfactory method of treatment.

Dr. O. D. POMEROY said that these growths were nothing more than enlarged glands, and that it was not always necessary to remove them, as, like the faucial tonsil, they would disappear if the existing catarrhal condition could be relieved by ordinary treatment with spray. Of course, if they grew so large as to act like foreign bodies and obstruct nasal respiration, they should be removed. He regarded Jarvis's snare as the most efficient means for removing the growths, and did not think that ether was necessary if the child was a large one. He thought it not well to remove all the growths at a single sitting, because of the liability to serious inflammatory reaction, which might extend to the middle ear.

Dr. O. B. DOUGLAS spoke of the reflex effects produced by these growths, and mentioned one case in which the patient referred her entire trouble to the larynx; whereas, when the nasal passages had been cleared out, the symptoms were removed and the voice was restored entirely.

Dr. BOSWORTH protested emphatically against the heterodox doctrine taught by Dr. Pomeroy, that these growths need not be removed unless they gave rise to ear troubles. He regarded it as one of the most dangerous conditions possible that could be allowed to remain in a young person.

Dr. POMEROY thought he put in a proviso concerning leaving these growths.

Dr. SWINBURNE thought that the cautery could not be used anywhere in the upper air-passages without producing an inflammatory reaction, but such as had produced any considerable trouble he had not seen. He regarded the forceps as a bad instrument if the palate could not be controlled; but, if the palate could be controlled, the entire growth could be removed without injuring other parts at all, and he had not seen inflammatory reaction follow the operation. He thought, with Dr. Bosworth, that in every case acute inflammation of the middle ear was likely to result, terminating in perforation; and not only the ear, but the general health was endangered by allowing these growths to remain.

A NEW HYPODERMIC SYRINGE.—Dr. O. B. DOUGLAS presented a new hypodermic syringe, made by Reyniers & Co., which he had found the most convenient of any he had ever used.

AMERICAN GYNÆCOLOGICAL SOCIETY.

(Concluded from page 331.)

Third Day—Morning Session.

In addition to those present at the preceding sessions, the following-named Fellows were in attendance: Dr. T. GAILLARD THOMAS, of New York; Dr. JAMES V. INGHAM, of Philadelphia; and Dr. GEORGE J. ENGELMANN, of St. Louis.

MENSTRUATION AFTER EXTIRPATION OF THE OVARIES.—Dr. HENRY F. CAMPBELL had prepared a paper with this title, of which he gave a brief oral summary. While conceding the preponderating influence of the ovaries in the menstrual function, he was inclined to think that there was a nervous mechanism, probably centering in the lumbar enlargement of the spinal cord, by the action of which, quite apart from "habit," periodical hæmorrhages from the uterus might be brought about that were wholly indistinguishable from ordinary menstruation. The speaker traced interesting analogies from the effects of forced lactation in re-establishing the menstrual function and in overcoming sterility.

Dr. WILLIAM GOODELL, of Philadelphia, had found menstruation after removal of the ovaries very uncommon, but was quite ready to coincide with Dr. Campbell as to its cause when it did take place, the irritation being that caused by the ligature. In saying that menstruation was uncommon under such circumstances, of course he did not include the false menstruation that always, according to his experience, took place within a few days after the operation. When menstruation did return, it was owing, he thought, to the fact that some ovarian structure was left behind, and, on account of the occasional difficulty of removing all ovarian tissue by the vaginal method of oöphorectomy, he had given up that method of operating.

Dr. THOMAS ADDIS EMMET, of New York, related a case of his own, in which menstruation had continued after complete removal of the ovaries.

Dr. HENRY J. GARRIGUES, of New York, referred to the occasional existence of a supplementary ovary.

Dr. T. GAILLARD THOMAS, of New York, thought the connection of the ovarian function with menstruation could not be regarded as yet accurately and minutely defined. In regard to Dr. Campbell's theory, he had no data. His impression was that menstruation after removal of the ovaries was exceptional. When it did take place, it was not true menstruation, but a metrorrhæxis, due to the habit of the uterus, and was not continued for a great length of time. He had found the same results, in this respect, after Tait's operation as after Battey's. He related a case of supplementary ovary in a patient from whom he had removed the two other ovaries early in the summer, and concerning whose menstrual function subsequently he knew nothing. He was decidedly inclined to adhere to the old theory of ovulation as the cause of menstruation.

Dr. WILLIAM H. BYFORD, of Chicago, thought our positive data bearing upon this question were very insufficient to serve the purpose of its elucidation. He agreed with what Dr. Thomas had put forward as to the facts generally observed, and also as to the ovulation theory. He had had only one instance of continued periodical hæmorrhage from the uterus after removal of both ovaries, and in that case there was not the strict periodicity of true menstruation.

Dr. MATTHEW D. MANN, of Buffalo, had always held the views expressed by Dr. Thomas and Dr. Byford, but his experience in the class of cases under discussion had led him to attribute the flow to some diseased condition of the uterus. In one case, what seemed to be true menstruation persisted after removal of both ovaries, together with the whole body of the

uterus, and was found to be due to the development of cancer of the cervix. He thought that reports of cases should not be accepted unless a thorough examination had been made to discover the cause of the loss of blood.

Dr. CAMPBELL knew that the discharge was not always due to portions of ovarian tissue being left behind, but, of course, there might be a third ovary, although he had never seen one.

Afternoon Session.

REMARKS ON CHRONIC ABSCESS OF THE PELVIS.—Dr. BYFORD read a paper, largely based on clinical data, in which he depicted the serious consequences that often took place from extensive chronic abscesses within the pelvis in women, and detailed the methods he had found most successful in their treatment. A notable point made was the satisfactory results that he had met with from thorough removal of the layer of flabby, ill-conditioned granulations that often lined the cavity of the abscess—tissue that it was extremely difficult to make take on a real reparative action. He had found that by removing it with a curette most gratifying results had been accomplished in several instances.

Dr. THOMAS thought there was much original research displayed in the paper. Such abscesses should always be sought for, but, when they were situated high in the pelvis, it was not generally advisable to attempt to give vent to their contents by puncture unless there was very positive evidence as to the precise situation of the accumulation. The aspirator was a very bad means of treatment, and he had made use of it only as a means of diagnosis. He preferred an exploring needle, followed by a small bistoury sliding in the groove of the needle. His practice was now to keep the opening from closing by inserting a small glass tube with a flange. The cavity was then stuffed with iodoformed tow, which was changed daily, and iodized-phenol injections were employed. In many cases he had found it necessary to open pelvic abscesses above the brim of the pelvis.

Dr. GOODELL was much struck with Dr. Byford's suggestion to use the curette in the cavity of the abscess, and thought it likely to be very serviceable. Where there was an opening above the brim, he passed a sound, made a counter-opening on its point through the vagina, and inserted a drainage-tube. Antiseptic injections were to be used; but he had found it necessary to be cautious in the use of carbolic acid for this purpose. Occasionally he had used the aspirator, but did not regard it with much favor. In one instance a furious inflammation had followed its use. He had resorted to the supra-pelvic incision in some instances.

Dr. R. STANSBURY SUTTON, of Pittsburg, Pa., had seen Esmarch scrape out abscesses with curettes.

Dr. CAMPBELL endeavored to encourage rather than repress granulations, and relied a good deal on the use of tartrate of iron and potassium to prevent the formation of flabby granulations, using it in the form of injections.

Dr. BYFORD admitted the danger of lighting up acute inflammation by exploratory procedures, and would inculcate caution in selecting for them only cases in which the abscess was chronic, and accompanied with well-marked fibrinous exudation. He, too, had opened chronic abscesses above the pelvis, but regarded it as a resource to be confined to desperate cases.

ERGOT: THE USE AND ABUSE OF THIS DANGEROUS DRUG.—Dr. GEORGE J. ENGELMANN, of St. Louis, read a paper in which he gave his experience in cases to which he had been called in consultation, and had had occasion to observe the evil effects of the administration of ergot by those previously in charge. The use of this drug he declared to be very widespread in his part of the country, and he felt that the harm it caused was so com-

mon that it would be well to banish it from obstetric practice altogether.

Dr. JOSEPH TABER JOHNSON, of Washington, referred to a paper he had read before the society last year, in which he had called attention to the points that Dr. Engelmann had enumerated. He now wished to defend the profession from the sweeping charge that they always used ergot in labor.

Dr. CAMPBELL almost always gave ergot in childbirth, but seldom before the birth of the child, and never before the full dilatation of the os uteri.

Dr. ALBERT H. SMITH, of Philadelphia, thought the use of ergot in midwifery an unmitigated evil. There was always danger of its doing harm, and it never did good.

Dr. ELLWOOD WILSON, of Philadelphia, was astonished to hear Dr. Engelmann say that ergot ought to be banished from use in midwifery. He always used it in cases of placenta prævia, and for the very purpose of causing tetanic contraction of the uterus. He always used it, too, in post-partum hæmorrhage. For this accident, it was usually given too late and in too large amount. In cases of abortion, also, he always employed ergot, and had never met with any bad results.

Dr. ENGELMANN referred again to some experiences of his own that had led him to entertain the decided views he had expressed in the paper.

A THEORY TO EXPLAIN THE RELAXATION OF THE VAGINA AND PERINEUM DURING LABOR.—This paper, by Dr. JAMES R. CHADWICK, of Boston, was read by title, the author having been obliged to return home before it was reached.

The eighth annual meeting was then declared adjourned. The next meeting will be held in Chicago, on Tuesday, Wednesday, and Thursday, September 23, 24, and 25, 1884.

NEW YORK OBSTETRICAL SOCIETY.

A STATED meeting was held May 1, 1883, Dr. C. C. LEE, President, in the chair.

TENACULUM-SCISSORS FOR TRACHELORRHAPHY.—Dr. B. F. DAWSON presented a pair of scissors with tenacular points for operations upon the lacerated cervix uteri. He had used them with satisfaction. The ordinary scissors often failed to take a satisfactory hold of the hard cicatricial tissue which existed in many cases.

WIRE-TWISTER.—Dr. DAWSON also presented a wire-twister with a sliding sheath upon the two blades, and claimed for it the advantage that it never slipped from its grasp upon the wire, and was simple in principle.

The PRESIDENT said that he had used the scissors presented by Dr. Dawson in one case, and they fulfilled the purpose perfectly. Care should be taken not to seize the tissue higher than it was desired to make the incision with the expectation that they would slip and fail to cut deep enough, like the ordinary scissors; they cut exactly where they were applied. With regard to the wire-twister, the advantage claimed for it, he thought, belonged equally to Sims's if properly used.

STRANGULATION OF AN OVARIAN CYST; RAPID DECOMPOSITION OF THE CONTENTS.—Dr. DAWSON said that about five months ago a woman, thirty-six years of age, the mother of three children, consulted him with regard to an enlargement of the abdomen which he found to be due to a cyst of the right ovary, and which was causing her considerable suffering. For purposes of confirming the diagnosis, he inserted a hypodermic needle, and withdrew a slightly turbid fluid. The specimen sent to the microscopist for examination was lost. A few weeks afterward the hypodermic needle was introduced a second time, and fluid was withdrawn which was of a darker color than that

withdrawn on the former occasion. The microscopist, Dr. Satterthwaite, said that it contained pus and blood. The patient was feeling better than before, and the tumor, she thought, seemed to be even smaller in size. Dr. Dawson, feeling that decomposition was taking place, directed her to return again within a short time, which she did, and the fluid withdrawn by the syringe was now found to be as dark as *café au lait*. Believing that the patient could not pass through the summer without relief, it was decided to operate immediately while the weather was cool, and she was admitted into the Woman's Hospital and operated upon April 13th. The tumor was found to have pretty extensive and apparently recent attachments to the omentum and other abdominal organs. It was a polycyst, with thick walls, almost of a gangrenous color, and with chocolate-colored contents, about two quarts in quantity. It was found that the pedicle had become twisted, and this had cut off the circulation to such an extent that decomposition was taking place. The specimen was examined by Dr. Coc, of the hospital, who reported that the cyst showed commencing fatty degeneration and necrosis of the inner wall. The fluid contents contained Drysdale's corpuscle, and a large amount of pus and blood. The corresponding tube, which was removed with the ovary, it was remarked, showed cilia in motion for some hours, a point simply of physiological interest. The right ovary was also diseased, and, with the tube, was removed. Both pedicles were ligated and cauterized. The patient was convalescent.

COCYGECTOMY.—Dr. DAWSON also presented the bones of the coccyx removed from a woman, twenty-one years of age, who had suffered for four years very severely from general pelvic and uterine pains, for which she had undergone treatment by various physicians without benefit. Dr. Dawson found retroversion of the uterus, for which he employed treatment, but, as no relief followed, and it was found that the pain was referred almost exclusively to the region of the coccyx, which was movable and had sustained an injury from a fall three or four years before, it was decided to perform coccygectomy. The patient had been doing exceedingly well since the operation a week ago. Dr. Dawson remarked that the operation for removal of an ordinary ovarian cyst was less tedious and troublesome than that for removal of the coccyx.

Dr. GARRIGUES said it was a somewhat hazardous procedure to introduce the hypodermic needle into an ovarian cyst, especially when the contents were known to be undergoing degeneration, and withdraw only a small amount of the fluid, and it ought to be done with antiseptic precautions.

He had shown, in his book on the "Diagnosis of Ovarian Cysts by Means of their Contents," that, if the cyst were tapped at all, it was safer to introduce the larger instrument and withdraw the whole of the contents, in order that the danger of after-escape of fluid into the peritoneal cavity and consequent inflammation might be avoided. Even when the smallest needle was introduced, and the cyst was not completely emptied, there was danger of some fluid escaping through the puncture and setting up peritonitis; whereas, if all the fluid were withdrawn, the puncture which had been made would heal perfectly before there could be a sufficient reaccumulation to distend the sac and escape by the opening. It was well known that a number of deaths had resulted from tapping ovarian cysts and not removing the entire contents. Dr. Drysdale, however, had made it a rule always to empty the cyst entirely upon tapping it; and probably he, working together with the late Dr. W. L. Atlee, had performed the operation oftener than any other surgeon, and had never had a fatal result. With regard to the movement of cilia in the Fallopian tube for some time, he once examined an ovarian cyst removed by Dr. Bozeman, in which the fluid was perfectly clear, and ciliary epithelium lined its inner walls, and in

that case the cilia were found in motion at least six hours after the operation.

The PRESIDENT said that Dr. Hanks had had a case which went to confirm Dr. Garrigues's statement with regard to the harmlessness of the large trocar when the entire fluid contents of cysts were withdrawn.

Dr. H. T. HANKS said that the case to which the President referred was one which he first saw about seven years ago. The patient had at first a polycyst, which had been tapped twice before he saw her. Since that time he himself had tapped the tumor ten times—with an aspirating needle three times early in his attendance on her, and of late with a large trocar. Even with this instrument, since several cysts were now present, and the contents had become so thick in some of these it was impossible to withdraw all the fluid, it had become necessary to make a number of punctures, and to pass the instrument, after its insertion, in different directions so as to reach the separate cysts. The patient was now seventy-eight years of age, and it was evident that the end was near.

Dr. J. B. HUNTER remarked that he had had a similar case in a woman, sixty-eight years of age, who evidently had an ovarian cyst, which during the past four years he had tapped a number of times, withdrawing all the contents, and it had been tapped before he saw her.

Dr. H. D. NICOLL said it was not uncommon for patients with ovarian cysts to come to the Woman's Hospital with the history that the tumor had been tapped several times without any bad result.

The PRESIDENT said that in England the operation of tapping the cyst for diagnostic purposes was considered so serious that it was not undertaken without the surgeon being prepared to remove the tumor entire, if necessary, immediately afterward.

TAIT'S OPERATION.—Dr. NICOLL presented the ovaries and tubes removed from a woman thirty years of age. She had suffered from pain in the region of the ovary during her entire menstrual life, and had of late become greatly reduced in health; all of the vital organs performed their functions in an unsatisfactory manner. The operation was done by Dr. Thomas this afternoon. Both ovaries were cystic, and the right Fallopian tube was much distended by liquid.

The PRESIDENT said that at a recent meeting of the society the opinion had been expressed that Tait's operation should not be resorted to in cases in which no symptoms existed except those of a subjective nature, such as neuralgia of the ovaries; that it should not be done unless positive evidence of disease of the ovaries and tubes could be discovered by physical examination. This he believed limited the field of the operation too much, and in support of this belief the following case was narrated, and the specimens were presented: A German woman, twenty years of age, single, entered his service in the Woman's Hospital three years ago, suffering from symptoms of chronic cellulitis and pelvic peritonitis. She was anæmic, feeble, and somewhat hysterical, and her general health was greatly impaired. The slightest pressure over the pelvis and uterus caused pain. This was due in part probably to some degree of cystitis. She remained in the hospital about four months, undergoing the usual treatment for pelvic cellulitis; but, not being allowed to use opium to relieve pain, she became discontented, and went out and sought employment. In consequence of being unable to work, however, she lost one position after another, and returned to the hospital about a year ago. Dr. Lee had seen her from time to time, but all the treatment employed proved ineffectual. She was turned over to the out-door department, and Dr. Dawson was equally unable to give relief. Last winter they separately reached the conclusion that the only hope of relief consisted in Tait's operation, as it seemed evident that the ovaries

were at fault, although this could not be demonstrated by physical examination. The patient willingly submitted to the operation, which was performed about three weeks ago. Both ovaries were found to contain numerous small cysts, and the tubes were thickened and inflamed. The temperature rose for one day to 101° F., but had since become normal. The operation was done without difficulty. In this connection he stated that the patient reported to the society, upon whom he performed this operation four months ago, who was then completely helpless, had since had perfect health, and was doing her regular housework. Besides these two cases, there were three others in which he had done the operation, in each of which benefit had resulted, although in three out of the five cases a sufficient length of time had not elapsed to determine as to the permanence of the result.

Dr. HUNTER thought that the propriety of the operation was evident in the case reported by the President, and that the operation was called for in some cases in which an absolute diagnosis could not be made.

PUERPERAL SEPTICEMIA.—Dr. GEORGE T. HARRISON read the history of a case, with remarks. [See p. 346.]

PROLONGED GESTATION.—Dr. W. M. CHAMBERLAIN reported further with regard to a case of prolonged gestation narrated at a recent meeting of the society. The patient was delivered on the 303d day after the close of her last menstrual period—one day less than ten calendar months, five days less than eleven lunar months; labor was very short and easy. The child was a female, weighing about eight pounds.

Dr. NICOLL was once detained in the city during the summer for about six weeks by a patient who was delivered on the 322d day after her last menstrual period, and who had had but a single connection, which took place on the fifteenth day after said menstrual period. The duration of pregnancy, therefore, had been 307 days. The child was puny and blind, but otherwise normal. It lived only a few months.

Dr. GARRIGUES thought that the possibility of pregnancy continuing for a considerable period beyond what was usual had been pretty conclusively settled, both by observation of reliable persons and also by analogy drawn from the lower animals. Physicians could not accept the maximum duration of pregnancy as established by the laws of a country as having any scientific value except as going to show that at all times exceptional cases had occurred in which pregnancy had been prolonged beyond the usual period.

HENRY J. GARRIGUES, M. D.,

B. F. DAWSON, M. D.,

FRANK P. FOSTER, M. D., *ex officio*,

Committee on Publication.

A STATED meeting was held May 15, 1883, Dr. C. C. LEE, President, in the chair.

TAIT'S OPERATION.—Dr. B. F. DAWSON related the following case and presented the specimen, consisting of the left Fallopian tube distended to the size of an egg, and inclosed with the ovary in firm false membrane. The ovary was atrophied from the pressure and constriction. About a month ago he was requested by Dr. Mary Jones, of Brooklyn, to see a patient, thirty-two years of age, married twice but never pregnant, who during her married life had suffered from severe dysmenorrhœa. During the past three years she had suffered from pelvic neuralgia almost continuously, referred more especially to the region of the left ovary. Her suffering had compelled her to resort to opium in large quantity; she had become very delicate, and her general health was greatly reduced. An examination revealed great tenderness in the entire pelvis, exaggerated on the left side, where a small adherent tumor was discovered, evidently an

ovarian cyst or a hydro-salpinx. An operation was plainly indicated, and was advised by Dr. Dawson and desired by the patient. It was performed yesterday, May 14th, by Dr. Jones, Dr. Dawson assisting. He found the adhesions firmer than in any case in which he had operated, and it was with the greatest difficulty that he was able to remove the ovary with its tube, the seat of hydro-salpinx. The operation having been necessarily tedious, and the patient's condition being low, it was not considered advisable to attempt to remove the right tube and ovary, which were apparently normal, but bound down even more firmly than the left had been. Moreover, the patient had referred her symptoms principally to the left side. Dr. Dawson thought that the pain, which was aggravated at the menstrual period, was intensified by the unyielding nature of the dense adhesions enveloping the distended tube and ovary. The patient gave a history of pelvic peritonitis five years previously, from which time her symptoms dated.

Dr. F. P. FOSTER asked, relating to the fear expressed by Dr. Dawson that fluid from the hydro-salpinx might have escaped into the peritoneal cavity, what amount of danger would attend such an accident?

Dr. DAWSON thought probably the same amount of danger that would attend the escape of fluid from a simple ovarian cyst.

The PRESIDENT said that the question asked by Dr. Foster had been answered practically in the cases reported by Tait and Hegar, where fluid from a hydro-salpinx had accidentally escaped into the peritoneal cavity and had not been followed by any bad results. Another practical question suggested by the case narrated by Dr. Dawson was as to whether an intelligent opinion could be formed from the history of a case with regard to the extent of the adhesions that might exist. It was doubtful whether, if the other ovary was diseased in the case related, the patient would be relieved of her symptoms.

Dr. FOSTER remarked that the question which he had asked had been suggested by the thought as to the possible advantage of puncturing the hydro-salpinx when removal of the organs was not practicable.

Dr. DAWSON thought it was a good rule in abdominal surgery to avoid emptying any fluid from any growth into the abdominal cavity, if it were possible to do so.

The PRESIDENT thought that the immunity from dangerous symptoms which had been observed in many cases where the proposed operation had been abandoned after opening the abdominal cavity gave grounds for the belief that as much progress would be made in explorative abdominal surgery during the next ten years as had been made, for instance, with regard to the operation of ovariectomy during the past ten years. He himself had witnessed five cases during the past winter in which an operation involving laparotomy had been abandoned, for one reason or another, after the abdominal incision had been made and the contents of the cavity had been explored. And in every instance the patient recovered.

Dr. J. G. PERRY thought it might prove an important diagnostic point in the class of cases referred to by Dr. Dawson to know the exact period at which the pain began—whether before, during, or after the flow.

Dr. DAWSON said that in the case reported the pain was continuously so severe that it would be difficult to reply to the question.

Dr. J. R. GOFFE, present by invitation, said that Dr. Hunter, in performing Tait's operation upon a patient at the Woman's Hospital last winter, found, after removing the ovary and tube upon the side where pain had been most complained of, that the other ovary was so adherent he would not take the risk of removing it. The case was one of hydro-salpinx, from which

the patient had been a great sufferer. She remained in the hospital five weeks after the operation, during which time there was complete immunity from pelvic pain. It was now just three months since the operation, and Dr. Goffe was informed by Dr. Hunter that a perfect cure had resulted.

SOLID TUMORS OF THE OVARIES; REMOVAL OF THE TUMORS WITH THE UTERUS.—The Secretary read a paper by Dr. M. D. MANN, of Buffalo, detailing a case of this sort, and accompanied by the specimens. [See the journal for July 7th, p. 4.]

HENRY J. GARRIGUES, M. D.,

B. F. DAWSON, M. D.,

FRANK P. FOSTER, M. D., *ex officio*,

Committee on Publication.

NEW YORK SOCIETY OF GERMAN PHYSICIANS.

A STATED meeting was held January 26, 1883, Dr. E. GRUENING in the chair.

MEASLES FOLLOWED BY TYPHOID FEVER.—Dr. SEIBERT reported a case of a child who had the measles and typhoid fever in close succession.

FATAL CASES OF CHOREA.—Dr. J. RUDISCH gave the history of three cases of chorea with fatal termination, all of which he had observed at Mount Sinai Hospital. The first was that of a boy of nineteen years, from Wilkesbarre, Pa., who had been admitted to the hospital eight years ago. The symptoms were slight at the beginning, but, in spite of active treatment with arsenic, they increased in severity. The patient's temperature rose to 104°, and even 105° F. Chloral hydrate and other hypnotics were employed in order to stop the jactitations and to induce sleep. Dr. Adler made a post-mortem examination, and found the vessels of the pia mater congested, punctiform hæmorrhages in the gray substance, and œdema of the brain.

The second case, that of a girl about fifteen years old, was similar in its course to the first.

The third case was that of a girl of the same age as the last, who had been in the institution twice. The first time she was under the care of Dr. Heineman, who examined her heart, but could not detect anything abnormal. When admitted for the second time she came under the care of Dr. Rudisch, who, upon examination of her heart, heard a systolic murmur, but found no enlargement of the organ. Ether, hypodermic injections of morphine, and large doses of bromide of potassium were needed to control the violent jactitations. Two days before death the temperature rose to 101°. On the night before the fatal issue one eighth of a grain of hyoscyamine had to be given subcutaneously in order to produce sleep. At the autopsy made by Dr. Heineman, the pia mater was found to be congested, the cortical substance of the brain was studded with minute hæmorrhages, and there was stenosis and insufficiency of the mitral valve.

Dr. A. JACOB said that the changes in the brain were evidently of a secondary nature, produced by the chorea, and should not be looked upon as the cause of the disease.

In answer to a question, Dr. RUDISCH said that there had been no positive history of rheumatism in any of the cases reported, but no value could be attached to this circumstance, because rheumatism in children was overlooked as a rule, or confounded with "growing pains."

INTUSSUSCEPTION.—Dr. JACOB presented a child eight months old suffering from intussusception. The infant had been sick for five weeks. It had on the average six passages a day, which at first had been greenish, but after the lapse of two weeks had become bloody and contained a considerable quantity of mucus. At the beginning of the child's illness a tumor made its appearance in the epigastrium, and by degrees changed its place until

it reached the hypogastric region. At the time of presentation it was ovoid in shape and of a soft consistence. With the finger introduced into the rectum to a distance of five cm., the tumor could also be felt. By bimanual manipulation it was ascertained to be movable. The child resented examination only slightly. The temperature was 96.5°. It took the breast for the last time on the morning of the day of its presentation to the society. The rectum was stretched in the direction of its axis in the same way as Dr. Jacobi had noticed it in other instances where intussusception had taken place at a short distance from the lower end of the bowel. In the present case the completion of the process had taken fully three weeks, and this was the reason that the general condition of the little patient was not so critical as it might have been.

The mother, who was present, being asked whether any pus had been observed in the dejections, answered in the affirmative.

Dr. JACOBI then said that under these circumstances it was doubtful if the present case was not one of abscess in the abdominal cavity.

Dr. SOHARLAU remarked that the mother probably did not know the difference between ordinary diarrhoeal and purulent matter.

Speaking of the treatment of the case, Dr. JACOBI said that he would first try to effect the reduction of the intussusception by injecting a large quantity of water into the bowel while the child was under the influence of an anæsthetic. He considered it probable, however, that such a trial would prove futile, on account of adhesions which must have formed already, and that laparotomy could not be avoided. He had had occasion to perform this operation a year ago upon a baby only eight weeks old. Although there were no adhesions in that case, it took fully twelve minutes to disentangle the intestinal loops in order to get at the seat of mischief.

SYPHILITIC PARALYSIS.—Dr. A. SEESSEL related the history of a case of paralysis due to syphilis. The patient, a young man, was under the care of Dr. Gulcke. He had had a chancre several years previous to the month of December, 1881, but did not notice any secondary symptoms. At the latter date, left-sided hemiplegia set in suddenly, without any premonitory symptoms and without loss of consciousness. Moderate doses of iodide of potassium rapidly improved his condition, so that after the end of three weeks he was able to walk about again. The patellar and Achilles reflexes, however, remained exaggerated.

Toward the end of January of the following year another attack of hemiplegia supervened, this time of the other side. There were no premonitory symptoms nor was there loss of consciousness. The use of the iodide was resumed, but with a negative result. Dr. Seessel saw the patient for the first time three weeks after the second attack. He found him to be a strongly-built man of thirty-three years. His mental faculties were unimpaired. The lower twigs of the right facial nerve were paralyzed, but there was no corresponding impairment of sensibility. There was right-sided hemiplegia, including the muscles of the neck, the back, and the abdomen. Sensibility and tactile perception were preserved throughout. The pulse was very rapid, and there was dyspnoea. His pronunciation was made somewhat indistinct by the impaired action of the muscular apparatus. There were also hiccough and a feeling of oppression in the præcordial region. Within three weeks all these symptoms were relieved to a great extent by the use of iodide of potassium, mercury, and electricity. The patellar and Achilles reflexes, however, continued to be heightened. If the patient tried to stand on his toes, violent convulsions ensued. These clonic contractions of the muscles could not be stopped by pressure upon the large nerve trunks, but only by passing a

strong induced current through the gastrocnemii muscles, or by dropping the heels forcibly upon the floor.

The seat of the disease in this case could only be sought for either in the inner capsule, or in the pons Varolii, or in the medulla oblongata. The combination of the facial paralysis with the hemiplegia pointed to disease of the first-mentioned locality; but the fact that there had been a preceding hemiplegia of the other side would render the hypothesis necessary that exactly similar processes had been going on in symmetrically disposed portions of the cerebral hemispheres. Such an occurrence would be very improbable; but, as it actually had been observed in one instance, it would be by no means impossible. The following symptoms militated against the presumption of the seat of the disease having been in the cerebral hemispheres: The impairment of the muscles of speech without aphasia or amnesia, the hiccough, the oppression in the region of the præcordia, the increased rate of the pulse, the dyspnoea, and the implication of the muscles of the neck and of the back. An affection of the pons Varolii could not have produced homonymous paralysis of the facial nerve, neither could the absence of degenerative reaction (*Entartungsreaction*) on the part of the paralyzed nerve be explained if the seat of disease was in that organ. The peculiar combination of the symptoms rather pointed to the pyramids as the seat of mischief.

According to Charcot, the heightened knee and ankle phenomena would forebode secondary contractures; but, as far as Dr. Seessel had been able to observe the case, there seemed to him to be no disposition toward such a result.

The rapid development of the symptoms spoke against the supposition of a tumor; but Dr. Seessel felt himself unable to say whether the symptoms were due to a gumma or to disease of the blood-vessels. Heubner, of Leipsic, had published a similar case, at the autopsy of which chronic pachymeningitis of the spinal cord and syphilitic degeneration of the blood-vessels were found.

Dr. J. RUDISCH asked whether no abnormality had been found about the heart of Dr. Seessel's patient.

Dr. SEESSEL said no.

Dr. A. SEIBERT related the case of a man, fifty years of age, who, while playing cards, suddenly noticed formication in his right side, which had also lost strength. He gained his bedroom unaided, though he had to ascend two flights of stairs. Dr. Seibert was called to see him, and found the power of the right arm considerably diminished and the left pupil dilated. The tendon reflex of the right side was increased. Ice was ordered to be put on the patient's head, and iodide of potassium was given internally. His condition did not at first improve, and after the lapse of four days both extremities of the right side had completely lost the power of motion as well as sensibility. Antisyphilitic remedies were persisted in, and under their use the condition of the patient was, in the course of time, considerably improved. Dr. Knapp at one time made an ophthalmoscopic examination, and, from the appearance of the fundus oculi, drew the conclusion that cerebral hæmorrhage was present. The patient subsequently died from diabetes mellitus.

Dr. E. GREENING remarked that there were no ophthalmoscopic signs known characteristic of either the presence or absence of cerebral hæmorrhage.

Dr. SEIBERT added to the history of his case that there had been diplopia two days before the hemiplegic attack, and that the temperature taken at his first visit was 101°.

Dr. SEESSEL said that the latter circumstance excluded simple cerebral hæmorrhage, as in such cases the temperature as a rule fell below the normal and remained so for two hours, after which time it again rose to the normal.

GOUT AND DIABETES.—Dr. JACOBI reported a case of gout

complicated with diabetes, and inquired whether any other members of the society had ever met with such a combination. He quoted from a recent work by Ebstein, who said that these two diseases might run parallel with each other.

POISONING WITH CONFECTIONERY.—Dr. ALFRED MEYER related cases of poisoning in two servant girls and several children by confectionery, of which he showed some. He had subjected a portion of it to the test with Marsh's apparatus and produced some of the deposits obtained. These deposits might be either arsenic or antimony. He did not employ the test to distinguish between these two, because he wanted to preserve the specimens for demonstration. He had no doubt that the confectionery contained arsenic, and not antimony, since there would be no occasion for adulteration with antimony, and the arsenic was evidently introduced with the coloring material. Tests had also been made for copper and for lead, but neither was found.

Dr. JACOBI mentioned a case of a thirteen-year-old girl who, coming from school one afternoon, bought a pickle and ate it. She began to vomit immediately, and died the next morning. Examination showed that the pickle had been dyed with arseniate of copper.

A STATED meeting was held February 23, 1883, Dr. L. STRAUS in the chair.

INFANTILE CONVULSIONS AND ECZEMA.—Dr. H. J. BOLDT presented a child six months old for diagnosis. One night six weeks ago the mother noticed that the child's breathing was peculiar. She lit the lamp and found the child in convulsions. The eyes were turned upward, the pupils were contracted, and the arms stretched out stiff. After remaining in this condition for about one minute, the baby recovered and slept for half an hour. After a certain lapse of time another similar spell occurred, during which there was froth at the mouth. During the last six weeks the child had gone through twelve such spells. It also suffered from eczema, which seemed to improve every time the convulsions occurred, but only to relapse after every attack. The nature of the disease seemed doubtful to the doctor. Epilepsy could be thought of, but this disease was hardly ever observed in early infancy. At the time of presentation the child also had the whooping-cough.

Dr. JACOBI examined the baby and found cranio-tabes and other symptoms of rickets. He thought that this was the cause of the convulsions, and that the treatment pursued ought to be chiefly directed against this condition of the system. He would lay special stress upon the child being frequently taken into the fresh air. He thought that if the little patient survived the next six or seven weeks, the chances of ultimate recovery would be increased, since it would then become more practicable to employ remedial agents.

STRANGULATED HERNIA.—Dr. A. G. GERSTER presented a child nineteen weeks old on whom he had performed kelotomy, combined with the radical operation for hernia, four weeks ago at the German Dispensary. The baby had been under the care of Dr. H. F. Kudlich, who had diagnosticated the presence of right inguinal hernia and ordered the application of a truss. The mother failed to carry out this order. She applied to an orthopaedic institution, where she was told that the child had no rupture, but something else, and where she was given a liquid with which she was to brush the parts. Evidently the condition had been mistaken for a hydrocele. The liquid, when used, caused an inflammation of the skin and the subjacent tissues. The protruded hernia was caught in the swollen tissue, and on January 23, 1883, symptoms of strangulation made their appearance. Dr. Kudlich saw the child the next day and immediately sent it to Dr. Gerster. It was brought to the latter

on January 26th. He found the baby in a state of collapse. There was slight tympanites, but no fever. The swelling in the right inguinal region gave a tympanitic resonance. No attempt at taxis was made, but the knife was at once resorted to. This happened to be dull, and the operator, having therefore to use more than ordinary force, inadvertently incised the intestine. The cut, which was parallel to the axis of the alimentary canal, involved about one centimetre of the peritoneal coat, but only nine millimetres of the mucous membrane. It was sealed by three catgut sutures, applied according to Lembert's method, i. e., without perforating the mucous membrane. None of the contents of the intestine had escaped. The external inguinal ring had to be nicked in order to reach the seat of constriction, which proved to be situated at the inner ring. The obstruction having been relieved by the knife, and the prolapsed portion of the small intestine, about eight centimetres long, having been found in good condition everywhere, especially at the place corresponding to the constriction, it was put back into the abdominal cavity. This was accomplished with some difficulty. At this juncture one of the catgut sutures by means of which the intestinal wound had been closed gave way and a small quantity of faecal matter escaped. The suture was at once replaced by another, and the hernial sac was carefully cleansed. After the reposition of the prolapsed intestinal loop had been accomplished, the neck of the hernial sac was closed by a constricting suture. No drainage-tube was used; the external wound was sewed up and dressed with iodoform. On the way home the child had a passage from the bowels. It nursed and slept well. The wound healed by first intention, and the child recovered without any mishap.

Dr. GERSTER also related another successful case of kelotomy which he had performed at the German Dispensary. The patient, a very anæmic and rachitic child two years old, had been brought to that institution on December 8, 1882, where the diagnosis of congenital hydrocele of the spermatic cord was made. The tumor could not be made to disappear. Four days later symptoms developed which raised a doubt as to the correctness of the diagnosis. An exploratory puncture revealed feculent matter. No symptoms of strangulation had as yet been observed. Between December 13th and 15th the patient vomited each time it took nourishment. Constipation set in, and on the 16th the fluid vomited had a feculent odor, and the child was brought to the dispensary with high fever and the abdomen considerably distended. Kelotomy was at once performed. The prolapsed intestine was found glued to the sac, and had to be peeled off with the handle of the scalpel. Before searching for the place of constriction the parts were disinfected carefully. No trace of the exploratory puncture could be found. A catgut suture was passed around the neck of the sac, a drainage-tube was introduced, and the wound was closed. On the 19th the sutures were found to have given way, but there was no suppuration, and the wound looked as if it had been freshly made. Under the application of iodoform it healed without any further trouble.

HYDROCEPHALUS.—Dr. H. J. BOLDT presented a child fifteen months old with hydrocephalus. When six months old it was attacked with convulsions, and two physicians who saw it diagnosticated basilar meningitis. Dr. Boldt first saw it five or six days after it had been taken sick. He found opisthotonus and dilated pupils. For the following three days the temperature taken in the rectum oscillated between 100° and 103° F. Dr. Janeway, who saw the child in consultation, held that it was a case of cerebro-spinal meningitis. The child recovered, and, after the lapse of two months, the cranial sutures began to widen and a well-marked hydrocephalus developed. The little one was now lively and nursed well, and the pupils reacted to light.

TUMOR OF THE ABDOMEN.—Dr. JACOBI presented a boy four years old whose abdomen had begun to enlarge last September. At the time of presentation there was considerable tympanites. Besides this condition, a rather large and firm tumor could be felt in the right hypogastric region which was scarcely if at all movable. Several smaller nodules could be made out in the neighborhood of the large tumor. Examination per rectum gave a negative result. The functions of the urinary apparatus and of the bowels were normal. There was an area of tympanitic percussion sound between the tumor and the liver, proving that there was no connection between them. There was no history of inflammation of the peritonæum, and therefore the diagnosis of perityphlitic exudation could be excluded. It was probably a case of multiple lympho-sarcoma.

Dr. GERSTER, referring to the difficulty of diagnosis in cases of intra-abdominal tumors, mentioned the case of a woman who had a swelling in the abdominal cavity which an expert diagnostician thought was a sarcoma of the mesentery. When Dr. Gerster examined the patient he found the large intestine full of scybala, which it took weeks to remove. When this had been accomplished the tumor had disappeared.

Dr. JACOBI remarked that the boy presented had never suffered from constipation, and that therefore there could be no suspicion of an accumulation of feces.

ENORMOUS ENLARGEMENT OF THE PROSTATE.—Dr. ISAAO ADLER presented the prostate gland and bladder of a man seventy-six years of age, with the following history: The patient, a strong and hearty man, had an attack of retention of urine eleven years ago, due to enlargement of the prostate gland and cystitis. A catheter was introduced and the bladder was washed out. After this had been done for several months, he discontinued treatment. Retention of urine again took place, and Dr. Adler was called in October 4, 1882. The enormously distended bladder reached above the umbilicus. A catheter was introduced, but it did not proceed further than the prostatic part of the urethra, where it seemed to burrow into softened tissues. After some time had been consumed in futile attempts to reach the bladder, aspiration was resorted to and a quart of urine was removed in this way. This had to be repeated in the evening of the same day. Next day the attempts at catheterization were resumed without success. The prostate was enormously enlarged, so that the index finger introduced into the rectum could not reach its upper margin. There was neither stricture nor cystitis present, but it was evidently a case of senile hypertrophy of the prostate gland with consequent elongation of the urethra and thickening of the muscular coat of the bladder. After the aspirator had been used seven or eight times, it was considered necessary to establish a permanent opening for the discharge of urine. Of the two methods which could be taken into consideration, the suprapubic and the perineal, the latter was evidently impracticable on account of the condition of the prostate gland. Dr. Adler therefore, on October 6th, performed suprapubic cystotomy. The cannula of the trocar was left in the wound. The operator intended to replace it by a rubber tube as soon as sufficient adhesions had formed between the bladder and the surrounding tissues. The day following the operation bronchitis set in, with strong fits of coughing, which caused hæmorrhage through the cannula. The patient became restless and nauseated, the abdomen was painful, chills supervened, and he succumbed October 10th.

The autopsy showed that the septicæmia had originated neither from the external wound nor from the false passages made by the catheter, but from a small wound in the posterior wall of the bladder, where the open mouth of a small vessel was discovered. This wound was caused by the cannula, against which the posterior wall of the bladder had been pressed during

the fits of coughing. This vessel became the seat of phlebitis, which was the starting-point of septicæmia.

Should a similar case present itself again to Dr. Adler, he would operate in the following manner: After incising the bladder freely, he would wash it out and introduce a drainage-tube. Then he would stitch the wound of the bladder, and, according to circumstances, also that of the skin, and apply an antiseptic dressing. In cases like the one related the peritonæum was pushed up so high by the fundus of the bladder that there was hardly any danger of peritonitis.

The prostate gland exhibited contained several myomata from the size of a filbert to that of a goose's egg. The prostatic part of the urethra was twice as long as normal, and was so much narrowed by the hypertrophic tissue of the prostate that not the thinnest catheter could be passed through, even after the specimen had been hardened in alcohol. There were three small false passages in the anterior portion of this part of the urethra, each a fraction of an inch long, and perforating the mucous membrane, but not going to any depth beyond it. There had been no symptoms of irritation in the neighborhood of these false passages, nor in that of the incision. The bladder was comparatively small, and its walls were moderately hypertrophied. On the posterior wall the erosion mentioned above could be seen.

METRITIS DISSEANS.—Dr. HENRY J. GARRIGUES presented some specimens obtained from females suffering from *metritis dissecans*, of which disease he had seen six cases in all.

MYXO-SARCOMA OF THE AXILLA.—Dr. GERSTER presented a specimen of a myxo-sarcoma as large as a fist, which he had removed by operation from the axilla of a young and robust butcher. The locality was a somewhat unusual one for such a growth. At the time of removal it was found to have started from the place of insertion of the latissimus dorsi muscle to the scapula, and to have pushed the large vessels of the axillary space in front of it. One portion of it showed a dark color, and it was at first feared that this was due to a melanotic nature of the growth. Upon closer inspection, however, the dark substance was recognized as extravasated blood, a hæmorrhage having been caused by an exploratory puncture which had been made some time before the operation. A portion of the latissimus dorsi muscle had to be excised together with the tumor.

A. G. GERSTER, M. D., *Secretary*.

A STATED meeting was held March 23, 1883, Dr. J. W. FRANKL in the chair.

CONGENITAL ABSENCE OF THE FOREARM AND HAND.—Dr. I. P. OBERNDORFER presented a young woman with congenital absence of the right forearm and hand. The left upper extremity was normal. The right humerus formed a stump which was as long as the left humerus. On the inner aspect of the lower end of the stump was a cutaneous knob the size of a cherry, which was, perhaps, a rudiment representing the missing parts.

Dr. A. JACOBI thought that the case was one of intra-uterine amputation by amniotic bands, and not one of arrest of development. He saw a confirmation of this view in the fact that there were no rudiments of the fingers present. He did not consider the small appendix at the lower end of the stump as such a rudiment on account of its lateral position.

Dr. PAUL F. MUNDÉ thought that it was a case of arrest of development, and not one of intra-uterine amputation. He could see no reason why an intra-uterine amputation should have taken place exactly through the joint.

Dr. J. W. FRANKL reminded the meeting of a case which had been presented to the society a few years ago by Dr. Rodenstein, and in which both arms and forearms were missing. The hands sprung from the shoulders.

Dr. A. G. GERSTER presented the patient from whom he had removed the myxo-sarcoma shown at the previous meeting.

CYSTIC TUMOR OF THE OVARY.—Dr. PAUL F. MUNDÉ presented an ovarian cyst which he had extirpated two months ago. The fluid contained in it was so clear that several of the physicians present at the operation expressed the opinion that it was a cyst of the broad ligament.

CYST OF THE BROAD LIGAMENT.—Dr. MUNDÉ also presented a specimen of the contents of an abdominal cyst which he had evacuated by tapping. The patient was a woman, aged forty-two, who had had the tumor for nine years. She was somewhat inconvenienced by the weight of the growth, but her general condition seemed not to be affected by it. Before the operation the circumference of the abdomen, measured over the umbilicus, was forty-five inches. It was thought to be probably a cyst of the broad ligament. The quantity of the fluid obtained was thirty-eight litres. A microscopic examination of the fluid was made by Dr. Henry J. Garrigues, who corroborated the supposition which had been entertained in regard to the origin of the tumor. Cysts of such a size, exceeding that of a uterus nine months pregnant, are usually accompanied by general cachexia. The present case was an exception to this rule. She left the hospital a week after the operation, which was, in all probability, a radical cure, from the fact that cysts of the broad ligament hardly ever refill after being once tapped.

TAIT'S OPERATION.—Dr. MUNDÉ also presented ovaries and Fallopian tubes of a woman, aged thirty-nine years, who had been a patient in Dr. J. Rudisch's wards at the Mount Sinai Hospital, and from there had been transferred to Dr. MUNDÉ's department. She suffered from severe and obstinate sciatica and other obscure neuralgic symptoms, involving especially the pelvis. She was a widow, and the mother of a ten-year-old child. There appeared to be some connection between her trouble and menstruation, and for this reason Dr. MUNDÉ proposed the removal of the ovaries and the Fallopian tubes. The patient assented to the proposition, which was carried out three weeks before the meeting. At the time of the presentation of the specimen the patient was convalescing as regarded healing of the wound, but no favorable change had as yet been observed in those symptoms for the relief of which the operation had been undertaken.

PELVIC SARCOMA.—Dr. MUNDÉ then showed a round-celled sarcoma of the posterior pelvic cellular tissue, removed after death from the body of a woman aged forty-two. The diagnosis of the case during life had been dubious. A tumor, showing uncertain fluctuation, had been felt, which pushed forward the posterior vaginal wall. It was tapped twice, each time yielding a small quantity of pus and blood. Subsequently, Dr. MUNDÉ made an incision by which he penetrated into a cavity containing about a quart of blood. The patient died shortly afterward. Dr. MUNDÉ had found no record of a case of sarcoma originating in the same locality as the specimen presented.

ENLARGEMENT OF THE SPLEEN.—Dr. MUNDÉ also reported the case of a female circus performer with a history of repeated attacks of intermittent fever, whose enlarged spleen reached nearly to the symphysis.

Dr. A. SCHAPPRINGER had observed a similar case, also in a woman who had been attached to an equestrian show.

Upon comparing notes, the two cases proved not to be identical.

Dr. I. P. OBERNDORFER reported a case of lympho-sarcoma of the left inguinal glands causing death by metastasis.

A STATED meeting was held April 27, 1883, Dr. E. SCHOTTKY in the chair.

PROLAPSE OF THE UTERUS.—Dr. C. A. VON RAMDOHR pre-

sented a woman with prolapse of the uterus, who wore a pessary invented by the doctor, which effectually retained the womb, and enabled the patient to walk about with comfort. An operation had been performed for the cure of the prolapse four years ago, but the cicatrix had yielded, and in six months the prolapse was again complete. He claimed that the pessary in question exerted no pressure whatever upon the symphysis.

Dr. B. SOHARLAU examined the case, and found that the pessary appeared to work very well. He thought, however, that it did press upon the symphysis.

CONGENITAL DEFORMITIES.—Dr. H. J. BOLDT presented several specimens of congenital deformities removed from the body of the child which had been exhibited to the society at its meeting of September 22, 1882, and which had since died, at the age of sixteen months. There had been a large protrusion on the right side of the body, which proved to be due to an enormous extra-peritoneal abscess. The left kidney showed fatty degeneration. The left suprarenal capsule had degenerated into a cyst containing from fifteen to eighteen ounces of fluid. As no trace of the right patella could be discovered during the life of the child, it had been considered wanting. Upon post-mortem examination, however, the missing bone was found on the posterior aspect of the right knee joint. The brain had been given to Dr. E. C. Spitzka, who was to present it at the next meeting of the society.

Dr. Boldt also presented a specimen removed from the body of a patient who had died of peritonitis.

SUBLINGUAL CYST.—Dr. RICHARD C. BRANDEIS presented a colored woman, twenty-three years of age, with a tumor of the floor of the buccal cavity. After having been present for fifteen years without giving rise to any noticeable discomfort, the tumor lately suddenly became painful, and began to increase in size rapidly. She then applied to the doctor, who made several incisions on both sides near the tongue, giving exit to about ten ounces of a mixture composed of blood, pus, and saliva. The swelling refilled rapidly, and a seton was introduced from the mouth. This procedure not producing the desired effect, at last an incision was made through the skin and a rubber drainage-tube inserted, which the patient wore at the time of presentation.

Dr. A. G. GERSTER was satisfied that it was a case of a congenital cyst which had become the seat of inflammation.

QUININE LOZENGES.—Dr. B. SOHARLAU presented specimens of lozenges prepared by Messrs. Reichert and Fingerhut, apothecaries, each lozenge containing two and a half grains of quinine tannate. They afforded a convenient means to administer the alkaloid to children, who took the lozenges readily.

EXTRA-GENITAL CHANCER.—Dr. HERMANN G. KLOTZ reported the case of a woman, seventy-eight years old, who had a syphilitic rash over her whole body. The initial lesion was discovered on her right forefinger.

Dr. C. A. VON RAMDOHR mentioned the case of a boy, nine years old, who suffered from a chancre of the prepuce which he had acquired in the regular way.

COLLAPSE FROM SALICYLIC ACID.—Dr. B. SOHARLAU related that he had met with several cases of children who, after taking comparatively small doses of salicylic acid, were seized with symptoms of collapse similar to those observed in light cases of carbolic-acid poisoning. The doses had been too small to allow these symptoms to be explained by the action of the pure drug itself. He also said that the glass jars containing salicylate of sodium very often smelt of carbolic acid.

Dr. M. ENGELSMANN said that this was probably the case only where the salicylate had been prepared, according to the old method, from carbolic acid, which method should be abolished.

The question was then discussed whether the discoloration

of the urine was invariably the first in the train of symptoms of poisoning by carbolic acid or not.

Dr. A. G. GERSTER had seen four cases, which he reported, in all of which the dark color of the urine was the first phenomenon observed, while Dr. A. SEIBERT had seen one case, which he also reported, where other symptoms preceded the discoloration of the urine.

Dr. A. JACOBI remarked that, according to Squibb, the salicylate of sodium kept well if protected from dampness. He was in the habit of prescribing the salt as kept ready in the drug-stores, and had had similar experiences to those of Dr. Scharlau.

Dr. A. G. CAILLÉ remarked that the smell of carbolic acid mentioned by Dr. Scharlau was possibly acquired by absorption of volatile particles by the salicylate of sodium. He alluded to the salts of bismuth, which are known to have the peculiar faculty of acquiring the smell of odoriferous substances placed in their vicinity.

A. G. GERSTER, M. D., *Secretary*.

Miscellany.

THERAPEUTICAL NOTES. *The Prevention and Cure of Seasickness.*—J. Henry Bennett, M. D. ("British Medical Journal," Aug. 11, 1883), communicates his own personal experience in preventing seasickness, from which he had been a great sufferer in his early life whenever he was compelled to take a journey by sea. He discovered by accident that two cups of *café noir*, taken, with sugar only, an hour or more before embarking, entirely prevented the expected attack of seasickness on the occasion of a short but very stormy voyage. Subsequent experimentation on himself and others has led him to the conclusion that coffee, if taken according to specified directions, will entirely prevent seasickness on short voyages. By following this plan, he has himself enjoyed immunity from seasickness for twenty-five years. Moreover, "scores of his friends and patients" have found the plan equally effective. It is as follows: The coffee to be used must be of good quality. A weak or adulterated article will not answer. A medicinal infusion of about an ounce and a half, made by boiling for ten minutes in four ounces of water, will furnish a "dose" of about the requisite quantity and strength. As the use of chicory or other wish-wash will lead to ignominious and exasperating failure, it is well to prepare the coffee at home, and carry it in a bottle or flask. It is to be taken about one hour before the voyage is begun, if sugar alone is added; if milk also is used, it must be taken about two hours and a half before leaving. The object is to insure its entire absorption, and to leave the stomach empty when the start is made. Furthermore, the coffee should be taken on an empty stomach. However, to prevent exhaustion, a nutritious but easily digested meal should be eaten long enough beforehand to be well out of the way when the time arrives for taking the coffee. The latter probably acts by toning the nervous system, and particularly the sympathetic system, rendering the entire organism less susceptible to the peculiar disturbance of seasickness. "Probably strong tea, brandy, wine, indeed, any powerful nerve-stimulant or sedative, would have the same effect as coffee, if taken in the same manner—that is, sufficiently long before going on board to be absorbed, and to leave the stomach empty and quiescent." A full stomach at the beginning of a voyage, if there be any predisposition to seasickness, tends rather to cause than to prevent its onset. And the failure of remedial agents taken by the stomach is due to the inability of that organ to absorb them, after the malady has begun.

On longer voyages it is well to take the coffee as above described, and then to lie down. The action of the coffee will last for eight or ten hours, and during this time the system may become accustomed to the motion of the vessel. No food, liquid or solid, should be taken until there is a feeling of hunger or thirst. For the latter, a mineral

water, soda or Apollinaris, with or without champagne or brandy, may be sipped. For hunger, *café au lait*, alone or with a little bread, may be taken, or other articles of food that have been recommended may be tried, for instance, curry.

For the continued sickness of long voyages experience has demonstrated the great value of injections of laudanum by the rectum. Fifteen to twenty drops may be given in an ounce and a half of warm water. If it is not retained it may be repeated in half an hour. Sleep, even in extreme cases, will usually be secured in this way, and during sleep the patient may become accustomed to the motion of the ship.

According to the experience of a naval surgeon, the best means of controlling confirmed desperate sickness is the constant drinking of lukewarm water. This is placed in quantity within the reach of the sufferer, who is to drink half a tumblerful when the sickness comes on. "It is immediately thrown up, but easily, and by and by calm comes."

The Elimination of Mercury during and after its Cutaneous Administration.—Dr. Schuster, of Aix-la-Chapelle ("Journal of Cutaneous and Venereal Diseases," September, 1883), has come to the following conclusions, from a series of more than a hundred examinations regarding the elimination of mercury in syphilitic patients during treatment by mercurial inunction and in patients who had been thus treated for from one to twelve years:

1. Mercury, administered by inunction or otherwise, is eliminated continuously.
2. This elimination, in ordinary cases, is completed after the lapse of six months.
3. Therefore there is no persistence in the organism of the mercury introduced.

These conclusions are opposed to the views held by Vajda and Paschkis, who believe that mercury remains stored up in the organism. This belief was based on the fact that, while mercury could often be found in the urine of those who were or had been under mercurial treatment, it could not always be detected, even in the urine of those who were actually undergoing a course of the treatment. Forty examinations of the fæces were made by Dr. Schuster with the following results: Mercury was regularly present in relatively large quantities during the course of the inunctions (the earliest examination was made ten days after the treatment had been begun). Mercury was present in the fæces for five months and a half after the inunctions had been discontinued; examinations were made at intervals of ten to fourteen days. Mercury was always present in the fæces when it was present in the urine; on the other hand, it frequently could not be detected in the urine when it was present in the fæces. After a prolonged course of inunction the amount of mercury in the fæces was so abundant that at times it could have been determined quantitatively.

Dr. Schuster concludes, from the foregoing facts, that the elimination of mercury, after courses of inunction of from thirty to forty-five days, is regular and continuous; that it is completed within six months after the discontinuance of the treatment; and that there is no persistence of mercury in the system. He suggests that the failure to detect mercury in the urine when it is present in the fæces may be due to the smallness of the quantity of urine analyzed. He admits that after very prolonged courses of treatment mercury might be found in the fæces even eight months thereafter. As, however, in many examinations, made from eight to twelve months after the discontinuance of the drug, in cases where it had been used from two to twelve years, analysis failed to detect any trace of mercury in either the fæces or the urine, he concludes that the elimination had been completely effected.

Vajda and Paschkis, in support of their view that mercury does persist in the system, profess to have found mercury in the urine two, three, five, seven, and even thirteen years after relatively short courses of inunction. Dr. Schuster criticises this evidence thus: Admitting that mercury was detected in these cases, it does not follow that the mercury found was that introduced into the system two, three, five, seven, and thirteen years previously. The cases cited were those of patients who had been several days, to the number of thirteen in some instances, in the same syphilitic ward with from twelve to twenty other patients, nearly all of whom were using daily inunctions of mercury. And, if analysis showed the presence of mercury, it is probable that

the subjects had inhaled the easily volatilized mercury that pervaded the atmosphere of the ward. Dr. Lesemann, of the Kalaukin Hospital, St. Petersburg, states that in his syphilitic ward, while inunctions were used exclusively, stomatitis frequently occurred, not only in those under treatment, but also "in patients to whom no mercurial preparation was given, so that the affection could only be ascribed to the effect of the mercurial vapors accumulating in the wards, which can not be removed by ordinary ventilation."

Veratrum Viride in the Treatment of Puerperal Eclampsia.—S. J. Spees, M. D., of Hillsboro, Ohio ("Cincinnati Lancet and Clinic," September 1, 1883), reports an interesting case of puerperal eclampsia relieved by the use of *Veratrum viride*. The patient was a primipara, twenty-two years old, healthy, and of full habit. After labor had been in progress twenty-four hours, there had been but little progress even of the first stage, while all the symptoms of the eclampsia had steadily increased in severity. Venesection had been resorted to, but without benefit. Turning was performed, and the woman delivered of twins. Delivery, however, did not relieve the eclampsia, but the condition of the patient became more and more alarming. Tincture of veratrum viride (Tilden's), m x , every one to three hours was given. Twelve hours afterward, m xx were given every thirty to sixty minutes, when the patient could swallow. Warmth was applied to the extremities and cold to the head. There was marked improvement within six hours. The doses were then decreased somewhat in size and frequency. The improvement continued, and the patient made a good recovery.

ARMY INTELLIGENCE.—*Official List of Changes of Officers serving in the Medical Department of the United States Army from September 15, 1883, to September 22, 1883.*—CAMPBELL, JOHN, Lieutenant Colonel and Surgeon, Medical Director, Department of the South. Granted leave of absence for fifteen days. Par. 2, S. O. 94, Department of the South, September 13, 1883. — ALEXANDER, CHARLES T., Major and Surgeon. Granted leave of absence for four months from October 1, 1883. Par. 1, S. O. 213, A. G. O., September 17, 1883. — ALEXANDER, CHARLES T., Major and Surgeon. On being relieved from duty at the United States Military Academy, October 1, 1883, to report in person to the commanding general, Department of the Missouri, for assignment to duty. Par. 7, S. O. 211, A. G. O., September 14, 1883. — GIBSON, JOSEPH R., Major and Surgeon. Relieved from duty in the Department of the East, October 1, 1883, and to report by letter to the commanding general, Department of the South, for assignment to duty. Par. 7, S. O. 211, A. G. O., September 14, 1883. — HORTON, SAMUEL M., Major and Surgeon. Relieved from duty in the Department of the Platte, October 1, 1883, and to report in person to the commanding general, Department of the Missouri, for assignment to duty. Par. 7, S. O. 211, A. G. O., September 14, 1883. — MEACHAM, FRANK, Major and Surgeon. Relieved from duty in the Department of the East, October 1, 1883, and to report in person to the commanding general, Department of the Platte, for assignment to duty. Par. 7, S. O. 211, A. G. O., September 14, 1883. — SMITH, ANDREW K., Major and Surgeon. Relieved from duty at Willet's Point, New York, October 1, 1883, and assigned to duty at the United States Military Academy, West Point, New York. Par. 7, S. O. 211, A. G. O., September 14, 1883. — TAYLOR, MORSE K., Major and Surgeon. Relieved from duty in the Department of the East, October 1, 1883, and to report in person to the commanding general, Department of the Missouri, for assignment to duty. Par. 7, S. O. 211, A. G. O., September 14, 1883. — WOLVERTON, WILLIAM D., Major and Surgeon. Relieved from duty in the Department of Dakota, October 1, 1883, and to report in person to the commanding general, Department of the East, for assignment to duty. Par. 7, S. O. 211, A. G. O., September 14, 1883. — APPEL, DANIEL M., Captain and Assistant Surgeon. Relieved from duty in the Department of the Missouri, October 1, 1883, and to report in person to the commanding general, Department of the East, for assignment to duty. Par. 7, S. O. 211, A. G. O., September 14, 1883. — MERRILL, JAMES C., Captain and Assistant Surgeon. Relieved from duty in the Department of Dakota, October 1, 1883, and to report in person to the commanding general, Department of the East, for assignment to duty. Par. 7, S. O. 211, A. G. O., September 14,

1883. — MAUS, LOUIS M., Captain and Assistant Surgeon. Relieved from duty in the Department of the Missouri, October 1, 1883, and to report in person to the commanding general, Department of Dakota, for assignment to duty. Par. 7, S. O. 211, A. G. O., September 14, 1883. — MUNN, CURTIS E., Captain and Assistant Surgeon. Relieved from duty in the Department of the Missouri, October 1, 1883, and to report in person to the commanding general, Department of the East, for assignment to duty. Par. 7, S. O. 211, A. G. O., September 14, 1883. — PATZKI, JULIUS H., Captain and Assistant Surgeon. Relieved from duty in the Department of the South, October 1, 1883, and to report in person to the commanding general, Department of the East, for assignment to duty. Par. 7, S. O. 211, A. G. O., September 14, 1883. — PRICE, CURTIS E., Captain and Assistant Surgeon. Relieved from duty in the Department of the East, October 1, 1883, and to report in person to the commanding general, Department of Dakota, for assignment to duty. Par. 7, S. O. 211, A. G. O., September 14, 1883. — VICKERY, RICHARD S., Captain and Assistant Surgeon. Relieved from duty in the Department of the Platte, October 1, 1883, and to report in person to the commanding general, Department of the Columbia, for assignment to duty. Par. 7, S. O. 211, A. G. O., September 14, 1883. — WEISEL, DANIEL, Captain and Assistant Surgeon. Relieved from duty in the Department of the East, October 1, 1883, and to report in person to the commanding general, Department of the Platte, for assignment to duty. Par. 7, S. O. 211, A. G. O., September 14, 1883. — APPEL, AARON H., First Lieutenant and Assistant Surgeon. The leave of absence granted July 20, 1883, extended one month. Par. 10, S. O. 211, A. G. O., September 14, 1883. — BREWSTER, WILLIAM B., First Lieutenant and Assistant Surgeon. Granted leave of absence for two months, from October 1, 1883, with permission to apply for an extension of four months. Par. 1, S. O. 107, Military Division of the Missouri, September 15, 1883. — STRONG, NORTON, First Lieutenant and Assistant Surgeon. Now on duty in the field near Fort Thornburgh, Utah, to accompany command to Fort Douglas, Utah, and there await further orders. Par. 2, S. O. 101, Department of the Platte, September 17, 1883.

NAVAL INTELLIGENCE.—*Official List of Changes in the Medical Corps of the Navy during the week ending September 22, 1883.*—Passed Assistant Surgeon J. H. Bryan, detached from the United States steamer Miantonomoh, and ordered to the Museum of Hygiene, Washington, D. C. — Passed Assistant Surgeon A. F. Magruder, detached from duty at Villefranche, France, and granted six months leave, with permission to remain abroad during that period. — Passed Assistant Surgeon C. H. H. Hall, to be detached from the United States steamer Ranger, on reporting of his relief, and wait orders. — Surgeon J. L. Neilson, detached from the receiving ship Franklin, at Norfolk, Va., and ordered to the United States steamer Ranger. — Surgeon William A. Corwin, ordered to the receiving ship Franklin, Norfolk, Va. — Passed Assistant Surgeon Robert Whiting, detached from the receiving ship Wabash, at Boston, and ordered to the Naval Hospital, Norfolk, Va.

SOCIETY MEETINGS FOR THE COMING WEEK.—*Monday, October 1st:* Medico-chirurgical Society of German Physicians; Morrisania Medical Society (private); Utica Medical Library Association; Medical Society of the County of Monmouth, N. J. (Freehold). *Tuesday, October 2d:* New York Neurological Society; New York Obstetrical Society (private); Medical Society of the County of Broome (annual); Medical Society of the County of Columbia (Hudson—annual); Medical Society of the County of Schoharie (semi-annual); Elmira Academy of Medicine; Buffalo Medical Association; Ogdensburg Medical Association; Medical Association of Northern New York (Malone, Franklin Co.); Croton Medical and Surgical Union (Katonah); Medical Society of the County of Hudson, N. J.; Medical Society of the County of Union, N. J. *Wednesday, October 3d:* New York Medico-Legal Society; Medical Society of the County of Richmond (Stapleton). *Thursday, October 4th:* American Academy of Medicine (New York—first day); New York Academy of Medicine; Society of Physicians of the Village of Canandaigua. *Friday, October 5th:* American Academy of Medicine (second day).

Lectures and Addresses.

LECTURES ON DISEASES OF THE KIDNEYS,

DELIVERED AT THE COLLEGE OF PHYSICIANS AND
SURGEONS,

By FRANCIS DELAFIELD, M.D.,

PROFESSOR OF PATHOLOGY AND PRACTICAL MEDICINE.

LECTURE IV.

The Symptoms and Treatment of Acute Parenchymatous Nephritis.

GENTLEMEN: I was speaking at the close of the last lecture of acute parenchymatous nephritis, and I told you that this was a form of inflammation of the kidney in which the morbid changes were confined to the epithelium of the tubules and the epithelial cells lining the capsules of the Malpighian bodies.

Such a form of nephritis occurs both as a primary or idiopathic inflammation and as a secondary or complicating inflammation. As a secondary and complicating inflammation it is of very common occurrence. As a primary condition it is not so common, but it is not at all an unusual form of disease.

With pneumonia and typhus fever, typhoid fever, and the like, we very frequently have an acute parenchymatous nephritis added as a complicating lesion. But the nephritis in these cases does not usually take on any very great degree of intensity, or add much to the symptoms of the patient, or to the dangers of the disease, and there are hardly any symptoms of the kidney lesion, except the changes in the urine. With cholera and yellow fever, and acute parenchymatous hepatitis, or acute yellow atrophy of the liver, we may have added a parenchymatous nephritis in a very severe form, and here the kidney lesion is very decided, and it adds itself both to the symptoms of the general disease and to the danger of death. With scarlet fever, diphtheria, pyæmia, acute peritonitis, and the like, and in persons suffering from poisoning by arsenic and phosphorus, we have a parenchymatous nephritis developed very frequently, but in different degrees of intensity. In some cases the nephritis is but very moderate in degree, and there are but very few symptoms, but in others it is very decided in character, and a matter of considerable consequence to the patient. In connection with the chronic and exhausting diseases, such as phthisis pulmonalis, septicæmia, and malignant new growths in various parts of the body, we may have a parenchymatous nephritis developed, and sometimes we can call it an acute, and sometimes a chronic nephritis, for it lasts as long as the original disease, and manifests itself by changes in the urine; but there are no other symptoms.

As regards the idiopathic or primary cases, we know but little concerning their causation. Sometimes they seem to be provoked by exposure to cold and wet, but at other times no reason for them can be discovered.

In the secondary cases of acute parenchymatous nephri-

tis there are usually some changes observable in the urine, even if there are no other symptoms of the kidney lesion at all. The quantity of urine remains unchanged in case the nephritis is not very marked, but, if it is very severe and acute, the urine is considerably diminished in quantity, or the function of the kidneys may be suspended altogether, and there will be no urine at all. The specific gravity of the urine is not much changed. Sometimes it is normal, and sometimes it is a little above or a little below normal. This is not what we should expect to be the case from our knowledge of the character of the lesion, for we should naturally expect that the specific gravity of the urine would be low, because the lesion involves principally the epithelial cells of the kidneys, and so we should expect that the solid matters excreted by these cells would be very much diminished. But in reality such is not the case, and so the specific gravity is not lowered. Albumin is very often present also, sometimes only a little and sometimes a very considerable amount, varying with the intensity of the inflammation. Casts are regularly present, usually of the hyaline and granular varieties, and not in very great numbers, but yet abundant enough to be found without great difficulty. Occasionally there will be a little blood in the urine, but not very often, except in the parenchymatous nephritis of scarlet fever, and sometimes in that of diphtheria. You are, however, especially liable to observe it with scarlet fever.

Dropsy is not often developed in these secondary cases. But the exception to this rule is where the kidney lesion complicates a scarlet fever; in these cases you do very often indeed see dropsy. But in other cases where the renal disease is a secondary lesion you will seldom find any.

Disturbances of the stomach, with nausea and a tendency to vomiting, occur in quite a good many cases, but it is always difficult to tell in these cases whether the disturbances of the stomach are due to the kidney disorder or to the main and primary disease.

Cerebral symptoms are developed in some cases in which the kidney lesion is very well marked. Thus, in yellow fever, acute yellow atrophy of the liver, scarlet fever, diphtheria, pyæmia, and in phosphorus and arsenic poisoning, the cerebral symptoms seem to be due to the kidney affection. These cerebral symptoms are the ordinary ones which belong to the different forms of Bright's disease, namely, convulsions, delirium, headache, coma, etc.

In the primary cases of acute parenchymatous nephritis there are also symptoms. The urine is usually diminished perceptibly in quantity, and sometimes it is suppressed altogether. The specific gravity is not much changed. It does not vary far from the normal, but it may be a little above or a little below it. Albumin is usually present in these cases in very considerable amount, and, when the test is applied, a very large precipitate of albumin is thrown down. But, though this is the rule, we find some exceptions to it. In some cases albumin is only present in small amount even when the disease is quite severe. Casts are regularly found, and they are hyaline, granular, and epithelial casts. In some cases very few of them will be found, and you may have to examine several specimens and search

a long while before you find them. But in other cases they are quite numerous, and especially whenever epithelial casts are present. You may also have blood, which has come from the kidneys, present in the urine in moderate amount.

When you come to look at the other symptoms in these idiopathic cases of acute parenchymatous nephritis, apart from the changes which occur in the urine, you will find that they all seem to group themselves into three different sets of cases.

In the first set there are a good many cases in which the most marked symptoms are the development of dropsical changes in the different parts of the body, disturbances of the functions of the stomach, and a loss of muscular strength, and with these there are the usual changes in the urine. The dropsy in these cases may reach a very considerable degree. Beginning usually in the feet or face, it extends rapidly until it involves the subcutaneous tissue of the feet, legs, and the whole body, and the fluid also accumulates at last in the various serous cavities of the peritonæum, the pleura, and the pericardium. In this way general anasarca spreads quickly over the whole body. There are also changes in the blood which show themselves by changes in the personal appearance. The face rapidly loses its natural color and becomes pale, the mucous membranes become white, the whole expression is changed, and the loss of color in the skin is rendered still more marked by reason of the œdema in the subcutaneous connective tissues. There is also in this set of cases a marked loss of appetite, showing that the functions of the stomach are becoming disordered, then distressing nausea and even attacks of occasional vomiting are apt to set in, and the patient begins to experience a marked loss of muscular strength. These people do not always feel sick enough to be confined to bed, or even to stay in the house, but they do not feel competent to do any very extensive amount of work, either physical or mental. But, though their strength is so much impaired, yet there is not usually any emaciation or loss of weight, but they may be even larger than they were before.

In the second set of cases the most marked symptoms are the cerebral symptoms. There may be no dropsy at all, but the cerebral symptoms are the prominent feature, and these are stupor, sometimes alternating with delirium, repeated attacks of convulsions, and finally a comatose condition. Repeated attacks of vomiting are a very marked symptom here, and it may occur not only after taking food, even in the smallest quantities, but also after drinking water, and even when there is nothing in the stomach at all, and this constant vomiting is a very harassing symptom. At the same time dyspnœa is often present, and it is the peculiar nervous dyspnœa of the different forms of Bright's disease, and with all the other symptoms there is pretty well-marked prostration. The cerebral symptoms are particularly marked in this set of cases, and to these are added the repeated attacks of vomiting, the nervous dyspnœa, and the rapid prostration, but there will perhaps be no dropsy at all.

In the third set of cases you have all the symptoms of the first two sets combined in the same case, namely, the

dropsy, the changes in the blood, the nausea, the vomiting, the cerebral symptoms, the nervous dyspnœa, and the prostration. So, then, you find that all cases group themselves into these three different sets—all, however, having the same kidney lesion, and all having certain of the symptoms of kidney lesions, but varying in different cases.

As regards the duration of acute parenchymatous nephritis, we find that in the secondary cases, where it is a complication of another disease, the kidney lesion and its train of symptoms continue as a rule during the whole course of the original disease; and as long as the pneumonia, or the typhus or the typhoid fever, or the scarlet fever, or other primary disease, lasts, so long does the kidney lesion with its symptoms continue. These kidney changes and symptoms make their appearance at different times in the course of the disease in different cases. In the case of scarlet fever the kidney changes are developed sometimes early and sometimes late, and the same is true with respect to pneumonia, typhus and typhoid fevers, and other cases. But when the renal complication is once established, its natural course is to go on to the termination of the original disease. If the patient recovers from the primary disease, and all the symptoms disappear, then, as a rule, the kidney symptoms also disappear after a little time—it may be within a few days, or not till after several weeks. But the kidney symptom that is especially apt to continue is the change in the urine, and this may not cease for some time after the apparent convalescence, not only from the primary but also from the kidney disease. In these cases the albumin and casts may be present in the urine, either in small or in large quantities for a time, and then completely disappear; but, though such an apparent recovery has taken place, the albumin and casts may recur again after once having disappeared, from the patient's being imprudent and exposing himself to cold or wet, and so lighting up a fresh attack. In this case there will, perhaps, be some change perceptible in the general health for a while, and then the urinary symptoms will again disappear and the patient will probably get entirely well. The rule is, that an acute parenchymatous nephritis complicating another disease terminates ultimately in recovery if the patient gets well of the original disease. Sometimes recovery is very rapid, and sometimes it takes a long time. But occasionally such recovery does not take place, but the kidney lesion goes on and changes into the condition of a chronic parenchymatous nephritis, and then the kidney symptoms continue and persist for an indefinite length of time. So there is always this possibility, that the acute secondary kidney lesion will not be recovered from, but will go on and change into the chronic form of the disease.

When we come to the primary cases of acute parenchymatous nephritis we find that those cases in which there are marked cerebral symptoms are not usually of very long duration, and for the reason that they are apt to prove fatal within a very few days, though we do find cases that are not fatal for quite a number of days. But sometimes the result of the case is better than this, and the patient may ultimately recover, and in such cases the duration of the disease is longer, extending over a period of one, two, three,

or four weeks, perhaps, and sometimes even longer. With those cases in which there is a combination of both cerebral symptoms and dropsy, the duration of the disease is apt to be not very long, for these cases are very prone to terminate fatally, and, in fact, they are the worst of all cases. Those cases in which the dropsy is the prominent symptom usually last for some time, and, after the lapse of several weeks or months, they terminate most frequently in recovery. These are the cases that are most apt of all to get well.

When we come to the treatment of this condition of the kidneys we find that, when the kidney lesion occurs as a secondary disease, there is very little that can be done in the way of treatment. In some cases the only evidence of the kidney trouble is found in the changes in the urine, and here, therefore, we only have to treat the original disease, and in those cases where other kidney symptoms are developed we still only attempt to treat the original disease. In the idiopathic cases the plan of treatment varies with the development of the symptoms. The class of cases in which treatment is most satisfactory is where the dropsy is the most prominent symptom. In these cases the dropsy is apt to be developed very rapidly; it is the first thing that attracts the patient's attention, and it continues to be very marked throughout the course of the disease. This, then, is a symptom that requires treatment. The first thing to be done with these patients is to put them to bed. Often they do not appear sick enough to feel like going to bed, or even to stay in the house, yet the bed is very much the best place for them, even from the first. The next thing to do is to put them on a fluid diet, principally of milk, or on milk and beef-tea alternating with each other. Then you may try from time to time the effect of cathartics and diuretics in diminishing the dropsy. In many of the cases where you give hydragogue cathartics at the end of the first week of the disease you will find that the patient will have a number of loose movements from the bowels, the dropsy will begin to diminish, he will pass more and more water constantly, and the dropsy will become steadily less and less. But in other cases, developed in the same way, though a number of loose movements may follow the administration of the cathartics, yet the dropsy is not diminished and the urine does not increase in quantity, and, in fact, the dropsy may become even more marked than before. If such is the case, there is no use in continuing to give cathartics at that time, but it is best to stop them and wait awhile before attempting to use them again. At the same time that you are giving cathartics you may try the effect of diuretics in increasing the quantity of urine and diminishing the amount of dropsy. If you find that by this means the urine is increased in amount and the dropsy diminished, you may continue the use of diuretics as long as they are indicated. But in some cases you will find that diuretics are not efficient, and under their use the urine is not increased in quantity and the dropsy is not diminished, and it may even be increased. Here there is no use in going on any longer with the diuretics, but it is better to stop them and wait a few days, and then try them again, as well as the cathartics, and see if they will have

any better effect. So keep on trying them at intervals, and, when at length the kidney lesion has reached a condition favorable to their use, you will get decided effects from them, and not before; there is no use in crowding them for day after day if you find that they produce no effect soon after their first administration. In some cases you will find that the use of diuretics is accompanied not only by an increase in the production of urine and a diminution in the dropsy, but you will also find in a few cases that after you have got rid of the dropsy the increased production of urine still continues, though the diuretics have been stopped. The patient may still go on passing eighty, ninety, or one hundred ounces of urine in the course of twenty-four hours. You should try to diminish this excessive production of urine, for it is of no use to the patient any longer; and sometimes the easiest way to do this is to administer the tincture of the chloride of iron in considerable doses.

Then, besides getting rid of the dropsy and keeping the patient in the house and in bed, and helping the fluid to disappear, we have also to try to improve the condition of the blood, and this we do in the ordinary way by the use of iron and oxygen. Then, as the patient gets better and the dropsy disappears, and the need for diuretics and cathartics becomes less and less until you give them up entirely, you should still continue the iron and oxygen, and gradually change from a fluid to a solid diet; and at the same time you should pay proper attention to the skin, and keep it well-nourished by washing and rubbing it briskly every day.

When all the other symptoms have disappeared, there will usually still be a little albumin and a few casts in the urine for some time, and as long as these continue there is a possibility of a relapse and a recurrence of the dropsy and the other symptoms, and it requires considerable care to avoid this. If the disease occurs during the cold season of the year, then it is proper to send the patient to a warmer climate for the rest of the winter if he can afford it, and, if it breaks out in warm weather, these patients must take care not to expose themselves to wet or sudden changes in the weather unnecessarily.

The cases in which the cerebral symptoms are especially well marked are not by any means amenable to treatment. These are the class of patients that give you the so-called uræmic symptoms; and not only this, but these uræmic symptoms are very well marked, and come on in a way in which we seem to have but very little influence over them. There are, however, several different ways of trying to help these patients along. In the first place, we must try and feed them in some way; but the vomiting is often so persistent and uncontrollable that we find this a hard thing to do. So we must give them their food in very small amounts, such as a teaspoonful of milk every half-hour or every hour, and, besides this, we may give a little bicarbonate of sodium or oxalate of cerium, in the ordinary way, to control the vomiting. Then, again, we can try to make these patients sweat by putting them in a hot-air bath. But often this will not succeed, and, after remaining in for a considerable time, there will yet be no perspiration at all; but, if it

docs succeed, so much the better for the patient. We can also try in other ways to induce a perspiration—that is, by the administration of pilocarpine or jaborandi. Pilocarpine in small doses hypodermically is, perhaps, the best way of administering these drugs. One tenth grain of pilocarpine once, twice, or three times a day, may be given, and in this way we try to get its specific effect on the skin rather than on the salivary glands. Then it is also well to try to act on the bowels so as to get free movements. But we find here, too, that the peculiar condition of the patient is sometimes such that ordinary cathartics will not produce any effect on the bowels. If, however, we can get free movements by them, so much the better for the patient.

The remedies we use commonly, in the uræmic attacks of Bright's disease, which are directed specially to the circulation, seem to be of no special service here, and those cases that get better at all seem to do so of themselves. Those cases where there are both dropsy and cerebral symptoms are also very hard to treat, but we try to get rid of the dropsy and the uræmic symptoms in the same way as in the other sets of cases. It is, however, very difficult to accomplish anything, and it is extremely hard either to sweat, purge, or feed these patients, or to produce any effect at all on the cerebral symptoms.

Original Communications.

THE STATUS. OF THE MEDICAL PROFESSION

IN THE
STATE OF NEW YORK.

By HENRY G. PIFFARD, M. D.

Sixth Article.

THE seventy-seventh annual meeting of the Medical Society of the State of New York convened February 6, 1883, and was opened with the inaugural address of the President, Dr. Harvey Jewett, of Ontario County. From this address I extract the following:

At the annual meeting in February, 1881, this society appointed a committee of five, from among the most distinguished medical gentlemen of the State, to consider and revise the old code of medical ethics which had governed our action for nearly forty years. In conformity with the instructions given this committee, they presented their report at the annual meeting in 1882. At the same time a substitute was offered to this effect: that we abolish all restrictions relative to the practice of medicine, as superfluous and unnecessary in the presence of the unwritten or higher law, leaving all ethical questions to be settled by the gentlemanly instincts of the profession. The report of the committee, as well as the substitute, was printed and placed in the hands of all members of the society who desired a copy, that they might examine and vote deliberately and understandingly upon the changes reported for their consideration and adoption. After a general discussion, in which all present had an opportunity to express their views, the report of the committee was

adopted by a large majority. The new code has not been received by the profession or the medical press, in this and in other States, with cordiality or favor, but, on the contrary, by the most outspoken and emphatic opposition. The county societies, at their first meetings, expressed their surprise at and disapproval of the new code adopted by a majority of their representatives, as unbecoming the dignity of the profession, and as revolutionary in its nature and "disorganizing in its tendency." A year's consideration, a calm and dispassionate discussion of the matter, have greatly modified the views of the profession in reference to the objectionable measure, and I trust a more conservative sentiment exists to-day than at the time of its adoption.

The American Medical Association, at its annual meeting at St. Paul, in June, 1882, refused admission to the delegates from the Medical Society of the State of New York, because they failed to recognize some of the provisions of the old code which had controlled their action for so many years, and had taken the liberty to substitute what was deemed a more progressive and liberal spirit in reference to established rational medicine as it exists at the present time. The objectionable clause in the new code consists in the permission of consultation with any legally qualified practitioner of medicine as not derogatory to the interest and dignity of the profession, in cases of emergency, or where such aid is required upon the broad ground of common humanity.

The advocates of the new code assert that this is merely permissive; that no one is under obligation, expressed or implied, to meet an irregular practitioner in consultation, unless he prefers to do so; but in certain cases it would be illiberal, inhumane, and contrary to the spirit of the age, to withhold professional aid because of "difference of opinion in creed or belief." The attention of the society at this meeting is directed to a consideration of the merits of this subject, to confirm, modify, or abolish the new code, as in their wisdom and judgment they may deem most conducive to the welfare, dignity, and interests of the medical profession of the State of New York.

At the conclusion of the President's address the standing committees of the society were announced, and after that communications from county societies, as the first order of business, were called for. The following were presented:

MEDICAL SOCIETY OF THE COUNTY OF WESTCHESTER, }
KATONAH, February 3, 1883. }

To the State Medical Society:

The following action was taken by the society at its annual meeting in 1882:

Resolved, That this society reaffirm its loyalty to its parent body, the American Medical Association, and thus declare its adherence to the code of ethics prescribed by that body as a guide in practice. It strongly deprecates the action of the State society, and maintains that such action is as unworthy as it is revolutionary; and that the adoption of such a code under such circumstances could result only in confusion and dishonor.

Resolved, That these resolutions be submitted to the State Medical Society at its next annual meeting through our regular delegates.

Carried. Affirmative, 28; negative, 2.

(J. G. WOOD, *Secretary pro tem.*)

J. FRANCIS CHAPMAN, *Secretary.*

ROCHESTER, N. Y.

At the annual meeting of the Monroe County Medical Society, held in the Common Council chambers at Rochester, N. Y., May 31, 1883, it was

Resolved, That it is the sense of the Monroe County Medical Society that the code of ethics be repealed, and that the secre-

tary notify the Medical Society of the State of New York of the action taken.

WILLIAM F. SHEEHAN,
Secretary of Monroe County Medical Society.

OSWEGO, N. Y., January 31, 1883.

To the New York State Medical Society:

At the annual meeting of the Oswego County Medical Society, held in Oswego, June 13, 1882, the following resolution was adopted, and the delegates to the next meeting of the New York State Society were instructed to bring the same before the society:

Resolved, That, in regard to ethics of consultations, the true rule of our profession is that, while we should be free to visit the sick under all circumstances and under whosever care, it is unworthy of us to call in consultation any but regular practitioners.

P. M. DOWD, *Secretary.*

After the transaction of some further business, Dr. E. R. Squibb, of Kings County, offered the following:

Whereas, The Special Committee on the Code of Ethics, in its report at the last annual meeting, recommended a change in one part of the code which was more in the nature of a revolution than of a revision, and, therefore, may be more radical than was expected or desired by the constituency of this society; and,

Whereas, That report was adopted at a session wherein only fifty-two members voted in the affirmative, and thus legislated for the entire profession of the State on a subject of vital importance in a direction which may not have been anticipated or desired by the profession at large; therefore,

Be it resolved, That all the action taken at the annual meeting of 1881, in regard to changing the code of ethics, be repealed, leaving the code to stand as it was before such action was taken.

Resolved, That a new Special Committee of five be nominated by the Nominating Committee of the society, and be appointed by the society to review the code of ethics, and to report at the annual meeting of 1884 any changes in the code that may be deemed advisable.

Resolved, That the report of the committee be discussed at the meeting of 1884, and be then laid over for final action at the meeting of 1885.

These resolutions were made the special order for the evening session. At this session the society went into committee of the whole, and Dr. Squibb opened the discussion, maintaining that the action of the last annual meeting upon the subject of the code of ethics was contrary to the plan of the organization of the society, and to the letter and the spirit of self-government by majority rule, and, therefore, ought to be reversed.

Dr. Squibb then went on to claim that the code of ethics was a part of the constitution of the society, and analogous to the constitution of the State, and that any amendments to be made in it should first be approved by the county societies.

Dr. Roosa, then taking the floor, said:

The Medical Society of the State of New York, as one of its inherent rights, has the power to make its own by-laws, and, by statute law, it has the right to call to the bar any county society which may refuse to cause its by-laws to conform to those of the State Medical Society. The argument, under the circumstances under which we meet to-night, is utterly absurd. What has happened? It is true that instructed delegates have come here from several county societies, and it is also true that from

these very counties have come men who have been made permanent members, and who are entirely at variance with the instructions given to the delegates. It is a most unwarrantable doctrine that the city of New York, with its nearly two millions of people, and nearly two thousand regular physicians, that the county of New York, representing a constituency something like that of twenty counties in this State, is not to have her full and proportionate voice in the discussion and decision of any question which comes before us here. Because she has the misfortune to be a city, and a large city, is her vote to be counted only equal to that of Alleghany? I believe that this society is of one accord that the argument of Dr. Squibb is not sufficient for it, and that the State society is prepared to-night, whatever it may have been on previous occasions, to settle this question for itself, without referring it back to the counties. The State society undertook this action of revising the code, not as has been charged very frequently during the year, not at the suggestion of specialists, not by any arrangement beforehand. If there ever was a spontaneous convention on the face of the earth, if there ever was a convention which represented its constituents, it was the annual meeting of the Medical Society of the State of New York in 1882, and it has been equaled in the annals of this society only by the immense meeting of to-night. At that meeting this society not only passed the revised code, but, without caucusing or consultation with any person as to whether they could or would support it, it passed a resolution much more radical, which had not been presented to any person, except one, before it was offered to this society at that meeting. That meeting of the society did represent its constituency perfectly well, and so does the meeting of the society to-night. There was no unfair action of any kind in the meeting of last year, whatever may have been the statements from any source. It was an open discussion, and the distinguished gentleman who has opened the debate had his full say, and he was unable to convince even one third of the meeting that his views were correct. It is assumed in the argument of the gentleman that we have such a union with the American Medical Association that we are compelled to ask that association before we make any change in our by-laws. Perhaps that question has been sufficiently answered; but a large number are present to-night who did not hear the discussion which took place this morning on that part of the subject. Let us understand ourselves distinctly. We recognize no allegiance to the American Medical Association except that of fraternal relations, and in case they refuse to admit our delegates, as they refused to do last year, this relation is dissolved. That association is not an incorporated association. If we ever subscribed to its code, we repealed that subscription last year. The American Medical Association has not taken a position in the medical world to be compared with this society of which we have the honor to be members. There is no secession in this business. There is no States rights in our action. If the union of these States was no more than that which exists between the American Medical Association and this State Medical Society, there never would have been a rebellion. There would have been no need of one. Each State would have been independent, as we are now of the so-called National Association. The gentleman lays great stress on the adjective "revolutionary." Revolutionary! We are not afraid of that word. All the advances in the world have been made by revolutions; but revolutions are never revolutions except as they are mouth-pieces of the people, and a revolution in this society will never be successful unless we represent the voice of the medical profession of the State of New York. Not of us in New York can any charge of misrepresentation be made. The county of New York comes up here with its hands untied and without fetters, and any member is at liberty to vote as his conscience

may dictate. The county of Kings, thanks to great effort in opposition to the gentleman who has just spoken, is also unfettered upon this floor. But, I am sorry to say, I am addressing some gentlemen who never had an opportunity to listen to arguments on the side of those of us who believe that an advance of the profession will be most effectually promoted by our assistance to the resolutions offered to-night, and they come up here bound and directed as to what they shall do. I consider these instructions as utterly illegal; and, when I had the honor to be president of this society, I ruled that these instructions were invalid, and one gentleman from New York violated his instructions, and he was never disciplined, although he was threatened. No, Mr. President, not upon us can any charge of revolution be fastened except that which is similar to what has emancipated many a country, and which will emancipate the State of New York. The few other arguments which have been advanced against the new code are easily answered. It has been assumed by the friends of the old code that we have played completely into the hands of the homœopaths and the eclectics, if consultation with any class of legally unqualified be allowed. Now, if you are not willing to trust the ex-presidents of this society, who, with very few exceptions, are entirely in favor of this expression of freedom in consultation, and the committee, not of specialists, but of a majority of general practitioners who drew up this code—if you are not ready to trust them as to whether we are going to surrender in any such way, then I have misunderstood this society.

It has also been said that this is a medical question, and that it can not be in any manner understood by men outside of the medical profession. If this was a question as to the value of iodide of potassium, or sulphide of calcium, or the sulphate of quinine as agents for controlling the symptoms of disease, then none except men like ourselves, who have received a medical education and have had experience in its practical application, are competent to decide it. But it is not a question of drugs or drugging. It is a question of ethics, a question of man's rights, his relations to his brother man, and his entire conduct toward the people of this community. The entire sentiment and conduct of the people is against this restricted trades-union clause in the American Medical Association code, and they have a right to their opinion, and are competent to give an opinion upon this question. The old code of our profession has made us the laughing-stock of educated men. We claim for ourselves, not the privilege of affiliating with quacks, but of giving our advice wherever it is asked for.

If we act simply as benefactors to our own kind, no matter if we stand alone for the next hundred years, we shall be right, and the Medical Society of the State of New York can afford to smile at those who refuse it fellowship.

Dr. H. G. Piffard, of New York, then said:

I desire to throw a little light upon one point raised by the gentleman from Kings. He drew an analogy between the constitution and by-laws of this society and the constitution and laws of the State. His special effort is to show that the code of ethics was virtually the constitution of this State society, and that it could not be altered except by the consent of the constituencies from which the society is recruited. This view, I think, is erroneous. The code of ethics we have adopted is, and always has been before, regarded as a by-law simply. The gentleman from Kings County seems to think that we derive our authority from county medical societies, that we have no authority over them, and that our by-laws are subject to their revision, instead of their by-laws being subject to the revision of the State Medical Society. In that the gentleman is absolutely mistaken. He quotes from a certain law enacted in 1813,

which gives us the power to make certain by-laws, and also gives county medical societies power to make certain by-laws, but he overlooks the fact that in 1866 another law was passed which enabled the State society to control the by-laws of county societies. . . . In other words, county societies are amenable to this society, not this society amenable to the county societies. . . .

Dr. H. R. Hopkins, of Erie, then addressed the Committee of the Whole.*

Dr. Didama, of Onondaga County, next spoke. Referring to the American code, he said:

. . . This code is the one which we adopted on condition of representation in the American Medical Association. If we repeal it, then we have no rightful representation in that association. It was repealed by a few, but their action was not the expression of the great mass of the profession of this State, only fifty-three persons voting one way, and they did not represent the opinion of four or five thousand regular practitioners of medicine in this State. There is a little complaint that our delegation—which was sent after our secession, if you choose to call it so, our cutting ourselves loose from the American Medical Association—was not received with respect and open honor. But I think every fair-minded man must allow that the association could have done nothing else. They were bound to reject the delegates sent from a society which had repudiated the code of ethics established for the government of the entire profession. The question is, Are we, the medical profession of the State of New York, prepared to cut ourselves loose from the American Medical Association?

Dr. Didama further stated that he considered a consultation with a homœopath, with a person who believed in the efficacy of the so-called dilutions, as conniving at a fraud.† In closing, he said:

With this I shall end, saying that a consultation with certain persons is derogatory to the medical profession, and that it is derogatory because those who do it are simply perpetrating a fraud.

Dr. Rochester, of Erie County, then spoke:

I arise with a full consciousness and appreciation of the soberness of this discussion to-night, and I hope that anything which I may say will be entirely free from personality. We have to look to common sense in this matter. I have been looking over this paper (State Code), and I have not seen any line of it which tells us what is to be gained by this proposed modification, except that broad humanity requires us to meet everybody who calls upon us. This I would say is simply a reflection on the medical profession throughout the length and breadth of the land, for there is no emergency, no casualty, no case of distress or anxiety to which medical men do not always go under any circumstances, without expectation of reward or remuneration. . . . Now, sir, I am a permanent member of the American Medical Association, and I have been for a long time a permanent member of that body, as I am of this society, and I am proud of it, and I should be sorry to give it up. But I will say if this new code passes I will give up my membership in the State Medical Society sooner than my permanent membership in the American Medical Association. . . .

Referring to mixed consultations, Dr. Rochester said:

We meet, we talk, but do not agree in therapeutics, very

* As Dr. Hopkins's remarks have already been published in full in the columns of this journal, they are here omitted.

† See this journal for August 18, 1883, pp. 177, 178,

likely not in diagnosis, and the people are satisfied; but how is it with the patient? Does the patient get any benefit? Not at all. We say we can not see anything to do different from what is being done, and if we did suggest anything it would not be carried out. It is impossible for any such thing to take place. We can not do it without degrading ourselves. We maintain, then, our first position—that we are kind, generous, and liberal to all those who call upon us, and always have been, and I do not see any possible advantage which can come from this modification. Perhaps we are mistaken. Now, we know that while they are carrying these colors they are giving the very drugs that regular practitioners do, except that sometimes they give a little more.

Dr. Agnew then addressed the meeting, but, as his remarks have already appeared in the columns of this journal, they are here omitted.

Dr. Seymour, of Rensselaer County, then spoke to the question, but his remarks were too voluminous to be given in full, and will hardly bear condensation. We must, therefore, refer the reader to the official report. Referring, however, to certain members of the profession residing in a neighboring county, he said: "This thing will not do, and if you come up here to strengthen the hands of these men against us, we will arraign you before this society, and kill you off professionally; and, if you are backed up by your *confrères*, we will twist their necks off too. That cock will not crow." During Dr. Seymour's remarks he was interrupted by the receipt of a telegram from Dr. L. A. Sayre of New York. Relative to this telegram Dr. Seymour said: "It is, perhaps, under the circumstances, hardly in order, but Dr. Sayre's name was mentioned, and then it was stated that he had met with homœopaths, and confirmed the new code, and violated the old code, and I took the liberty of sending a telegram to Dr. Sayre, telling him that the charge had been made; and I understood that a letter proving the charge would be read at this meeting, and called upon him to vindicate himself, and I got this telegram from some one in his house: 'Dr. Sayre has been confined to his bed for two weeks, and it is impossible for him to be moved at present. He says: "I saw in consultation Dr. Baldwin, who was treating the patient most heroically all through. He had not diagnosed the case, and afterward I learned that he was a homœopath, although from what I saw of him no one would suspect that he was. He was at the time using hypodermic injections of morphine, and in no respect carrying out the principles of Hahnemann."'"

Dr. Seymour further said: "Once or twice in my life I have violated the code myself, and been to consult with homœopaths—once in a case of placenta prævia, where the woman was bleeding to death. After I had righted things up, and got the woman so I thought she would live, I turned around to this homœopathic gentlemen and said to him, 'You have abundant time now to consult with one of your own kind, and I will not trouble you any further.' For this consultation I was condemned, and I had to vindicate myself upon the principle of humanity."

This concluded the arguments on the question before the society. After some parliamentary skirmishing, the question was taken on Dr. Squibb's resolutions. The result of the vote showed 99 ayes to 105 nays, and the resolu-

tions were declared lost. To carry them would have required a two-thirds affirmative vote, which in the ballot cast would have been 136.

The result of this ballot exhibited one fact with great distinctness—namely, that the majority of the representatives of the profession of this State were not in favor of a restoration of the old code. It had been repeatedly predicted by the hostile press outside the State that the action of the State society of the previous year would be reversed at this meeting. The vote showed, only too clearly, that, despite the exertions that had been made in behalf of the old code, and despite the abuse that had been heaped on us from without, the profession of the State were thoroughly convinced of the evil effects of the code in the past, and were not going to submit to them in the future, even at the expense of loss of representation in the American Medical Association.

Subsequent to the announcement of the vote, Dr. Roosa moved the adoption of his "substitute," which, on motion, was laid over until 1884. Dr. J. G. Adams entered a protest, as delegate from the New York Academy of Medicine, against the action of the State society. This protest was clearly an impropriety if offered in behalf of the Academy, and should not have been received as an expression of the Academy's feelings and views, inasmuch as a majority of the delegates of the Academy who were present voted with the majority. It may further be stated that the Academy had not expressed its views on the subject, and, as a curiosity in the matter of society by-laws, it may be stated that the members of the Academy have no direct voice in the selection of the delegates that are supposed to represent them, either in the State society or in the American Medical Association.

On the second day of the session the Committee on Legislation made its report, and during its discussion the question of ethics was incidentally revived. The committee having asked for an appropriation of five hundred dollars, for the purpose of procuring legal assistance, with the view to desirable legislation, Dr. Hopkins, of Buffalo, spoke in favor of the motion to adopt the report, to which Dr. Van de Warker, of Onondaga County, replied as follows:

I did have great hopes for the cause of medical education in this State, notwithstanding the fact that nearly every attempt this State has made to regulate the practice of medicine has been a terrible failure—so terrible that, if medical men attempt to make laws, it is to be hoped that they will be such laws as will be of benefit to the profession. The law of 1880, which legalized every quack, was a deplorable failure, and the law of 1874, which gave the medical societies of this State certain powers, was another terrible failure, and, every time this society has attempted to dabble in medical law at all, the profession at large has deplored the fact.

Dr. Sturgis: I would ask the gentleman from Onondaga if any effort has been made in his county to prosecute illegal practitioners?

Dr. Van de Warker: An Indian doctor rode through our principal streets the other day, adorned with war paint and feathers, and he registered in the Clerk's office, and is now considered a legalized practitioner, and he stands on the same footing with the other members of the profession.

Dr. Sturgis: Has any attempt been made to prosecute illegal practitioners in your county?

Dr. Van de Warker: Prosecution was not attempted in my county. . . . The legislation of 1880 was not to protect the regular practitioner, but to protect quacks, just as the code indorsed last night was not for the regular profession, but for quacks.

Dr. Sturgis: I do not think the gentleman can speak fairly of a point which has not been tried in his own county, and in which he has not had any experience. At all events, what he states is at variance with what has been the experience of the Medical Society of the County of New York, and the same is good for every county medical society in the State. When that law passed, the physicians of New York made up their minds to make a fair trial of it, and to determine wherein it was deficient, and to try to remedy its defects. We went to our county medical society and told them that the question was simply one of money, and that we needed money to employ legal counsel. We said to them, If you will give us your support, we will carry out the provisions of the law. The result has been that sixty suits have been brought, and in only three has the society failed to establish its case, and in every offense the man has been fined and driven out of practice. We got hold not only of irregular practitioners, but we have our hands on the throat of one of the colleges of this city. When the gentleman says that the law of 1880 protects quacks and protects irregular practitioners, he makes a mistake.

Dr. Smith (Secretary of the society): There is an opinion, widely prevalent in the medical profession of this State, that the mere fact of registration in the county clerk's office makes a man a legally qualified practitioner. It does no such thing. The law requires the legally qualified practitioner in his registration to state the authority under which he claims to be qualified, and a person who has no legal right to practice medicine, if he registers under the law of 1880, will often furnish evidence in the statement he makes in his registration that he is not legally qualified; so that that law, instead of protecting quacks, often causes them to furnish proof whereby they can be convicted of practicing illegally.

The introduction of the questions relating to the law of 1880 into the code controversy, by the supporters of the old code, was irrelevant and uncalled for, as it had no bearing on the real issues under discussion. One may, perhaps, excuse words spoken hastily in the heat of debate, but we can not so readily overlook misstatements made in the calm seclusion of the sanctum. The following references to the law of 1880 are taken from the "Ephemeris" for May, 1883, pp. 279 and 280:

"The law entitled An act to regulate the licensing of physicians and surgeons, passed May 20, 1880, through the efforts of the *New York County Medical Society*," etc. (italics our own).

The fact is that the New York County Society had nothing whatever to do with this law. It was passed through by the efforts of a committee of the State society appointed for the purpose, and the entire expense of its passage, amounting to a little less than fifty dollars, was borne by the State society. The committee itself was composed of one member from Albany, one from Kings, and one from New York counties.

"This authorizing and licensing registry law, which, seen now in the light of more recent action, appears as the first public step taken in this no-code movement, levels all inequalities, and ranks the best names in the profession with those qualified for no profession and undeserving of recognition, whose lack of qualifica-

tions must be all the more dangerous to the public welfare for being legally authorized and licensed. This class, though legally authorized in a roundabout way, through diplomas and certificates of bodies incorporated under a general act, would never have been legally recognized and licensed but for this registry law, and the harm done by thus recognizing a large number will far overbalance the good of preventing the registry of a few, or the prosecution of a few who may be so incautious as to register fraudulently."

With reference to the foregoing, we are compelled to say that we do not remember to have ever read two consecutive sentences in which were to be found so many errors as to fact, and language so well calculated to lead to false inferences. If the writer in the "Ephemeris" had taken a little care to ascertain the facts, he could hardly have had the hardihood to refer to the registry law as the "first step taken in this no-code movement." The no-code movement, as we understand it, originated in a resolution introduced by Dr. Roosa, at the meeting of the State society in 1882. This movement has gained a considerable following, but, so far as we are aware, not a single one of the supporters of this movement had any hand or part in the passage of the Act of 1880. We further say that of those who did give their time and exertions to the furtherance of this registry law, not a single one has since appeared as an advocate of the no-code movement.

"Levels all inequalities." Every citizen, before voting at a general election, must in this State register his qualifications; but we fail to see that this brings down the statesman to the level of the pot-house politician, or the learned and virtuous to the level of the ignorant and criminal. In one respect only, not in "all," does it level. Just so the medical law levels in but one respect only, and in a very necessary respect, as it is the only means by which the State or any one else can learn the number or the qualifications of those who are legally authorized to practice within the borders of the State. The writer of this does not feel himself specially degraded by the fact that his name is on the same list with the names of physicians whom he may deem of inferior professional quality, any more than he does that his name goes on the same polling-list with those whom he regards as politically inferior.

The sentence, "This class, though legally authorized in a roundabout way through diplomas and certificates of bodies incorporated under a general law, would never have been legally recognized and licensed but for this registry law," etc., will bear a little analysis. It implies, first, that there exists a class of practitioners who should never have been legally authorized to practice. With this sentiment we agree heartily, but the reader should be made aware that the only incorporated bodies that granted these legal authorizations under "a general law" were the State and county societies acting in accordance with powers granted them by various statutes passed between the years 1806 and 1874. The reader might also have been informed that the registry law of 1880 revokes these powers so long possessed by the county societies, and which they in so many instances grossly abused. In the portion of the sentence that we have quoted there is a curious contradiction. The writer admits that a certain "class" were legally authorized by

certain "incorporated bodies," and then says that they "would never have been legally recognized and licensed but for this registry law." The fact is, the registry law did not legally authorize a single person to practice medicine who at the time of its passage was not already legally authorized in virtue of earlier laws (with an exception to be noted in a moment). The terms of the act are sufficiently explicit, and no misconception of their import should have arisen in the mind of any one who had read them. To make this perfectly clear, we quote the words of the act, italicizing the portions that bear on the present question:

A person shall not practice physic or surgery within the State unless he is twenty-one years of age, and either has been *heretofore authorized so to do, pursuant to the laws in force at the time of his authorization*, or is hereafter authorized so to do as prescribed by chapter seven hundred and forty-six of the laws of eighteen hundred and seventy-two, or by subsequent sections of this act.

Every person *now lawfully engaged in the practice of physic and surgery within the State shall . . . register.*

After the passage of the act, graduates in medicine only could commence the practice of medicine in the State. The exception that we alluded to a moment ago is in the case of medical students who had been in practice for ten years. These latter were accorded an exemption from some of the provisions of the act for a period of two years from the date of its passage. We doubt if there have been six persons in the entire State who availed themselves of this exemption. It is to be hoped that the writer in the "Ephemeris" will in the future be a little more careful as to the introduction of irrelevant matters, and a little more accurate in his statements regarding them.

We regret the necessity for this extensive digression, and in our next will continue the historical exposition of the code controversy.

THE PATHOLOGY OF ACUTE LOBAR PNEUMONIA

FROM A NEW STANDPOINT.

BY WILLIAM D. SCHUYLER, M. D.

Third Article.

A Dynamo-physico-physiological Disease.—Its Pathogenesis.—Its Functional Pathology.

HAVING shown that the pathological process we are studying is *not an inflammatory disease*; furthermore, that *it is not essentially a fever* of an infectious or specific character, with a local, depurative pulmonary lesion; and, lastly, that, contrary to general, and, as far as I am aware, universal pathological teaching, the local affection, the anatomical process in the lungs, *is not due to an inflammatory action*, is not an inflammation of the pulmonary stroma; I now announce and submit, and for the first time, that *acute lobar pneumonia*, in its genesis and throughout, *is essentially a dynamic disease*, a dynamo-physico-functional malady; dynamic as to the genesis of its initial lesion, physico-functional and dynamic as to the resulting development of its anatomical process and the cause and nature of its dangers.

It emphatically comprises a specific pathology, and *can not be classed with any other affection.*

Contrary to the tendency of more recent teaching, I shall show that *the local affection is essentially the disease, and is the cause of the constitutional phenomena.*

The determining, immediate cause of the *local process*, its incipient primary lesion, is a functional insufficiency—adynamica—of the pulmonary capillaries, few or many. This insufficiency may be regarded as an accidental occurrence; and the subsequent growth of the resulting anatomical process thus determined is the result of the necessarily continuing, but now deranged, vital functional actions.

A morbid agent, a *materies morbi* in the blood, specific or diverse (one or a variety), can not be maintained as an indispensable cause for the genesis of this malady; although indirectly, as a predisposing condition, any morbid cause may lead to its development. From the standpoint of the hypothesis hereby advanced, *acute lobar pneumonia is largely a preventable disease.**

The pathogenesis of this malady, although involving many and varied conditions, will be found to be very simple, to reside in adynamic or asthenic states on the one hand, and conditions of local blood-pressure, dynamic causes, upon the other.

The necessary adynamia is a local condition, and it may be limited as such, or it may so exist as a local expression of a general asthenia.

The *causes* which lead to the development of pneumonia, as usual and in general, *are predisposing and exciting.* The predisposing are: Any acute or chronic influences which conduce to or permit the development of a non-resistant, atonic, pulmonary capillary state—namely, age, exhausting conditions, malnutrition, nervous exhaustion from any cause (from labor, especially mental, with anxiety, and comprising long hours of watching, from great mental strain with deprivation of sleep); alcoholism, especially acute states, with its consequent derangement of nutrition, and resulting nervous debility and irritability further occasioned by loss of rest. Exhausting occupations, especially where such are followed under depressing influences, may lead to its development. Occupations in a confined, heated atmosphere, which promote debility of the skin and render it sensitive, or increase its reflex spastic tendencies, predispose the system to an attack. Also, acute and chronic maladies which create similar sensitive and irritable states of the cutaneous covering, such as ephemeral febrile states, rheumatic conditions, attacks of acute rheumatism, deranged functional action, which develop conditions known as bilious, diseases of the liver and kidneys, especially Bright's disease, are predisposing. Excessive indulgence in eating, with physical indolence, which develops a full habit and a fatty degenerate condition of the tissues, is largely predisposing. And, last-

* For the purpose of affording a more logical basis of explanation for this hypothesis, before proceeding to set forth its scheme, and give its more subsequent rationale, I shall briefly refer to pathogenesis, and give the pathological features of the affection. The latter will include especially its functional disturbances. Although involving some delay, this order commends itself to the writer as most natural, and in the end satisfactory.

ly, extensive traumatism, which especially depresses the nervous function, is a frequent predisposing cause.

The exciting cause of the development of a pneumonic attack may be any influence which suddenly determines the systemic venous blood inward upon the organically exposed, debilitated, and predisposed pulmonary circulation with such volume and pressure that the force and impingement transmitted shall overcome the existing tonic capacity of the pulmonary capillary vessels and render them for the moment insufficient for their function, and more or less atonic. A sudden chilling of an exposed and predisposed external surface of the body—the skin—the taking of cold, which results in an internal determination of the venous blood, as above set forth, may afford an example of an immediate cause, and is probably one of the most frequent. Over-repletion, causing a sudden augmentation of the blood volume, where there exists the adequate predisposing conditions, may prove an exciting cause. Vaso-motor insufficiency, sympathetic ashenia, as following traumatism, or from any cause, may inaugurate the process.

The pathology of this malady, in contradistinction to the simplicity of its pathogenesis, is most complex. It comprises: (1) A well-marked synthetic group of general symptoms, sufficiently characteristic in themselves to lead to the belief and teaching that the disease is essentially a constitutional affection. (2) It also comprises the formation and removal of a morbid anatomical process in the lungs, which is manifest by equally well-marked and not less characteristic physical signs. The magnitude of this local process in general and the dependence of the constitutional symptoms upon its progress have caused it also to be regarded as the essential of the disease. Also (3), furthermore, as comprising features of the highest clinical importance, in a prognostic sense, it involves such functional difficulties and dangers as justify a special reference to the morbid physiology engendered by it.

The constitutional symptoms and general course of the disease will be discussed under "symptoms and course." The local process will be studied under "morbid anatomy"; and therein its different events, with their connection and significance, will be fully set forth. Yet, as to the development of this process and its presence are to be attributed the physiological derangements and functional dangers alluded to, and, as its varied conditions of progress cause different degrees and kinds of functional stress, it is pertinent to state in this place with reference to it, to the morbid anatomy, that its process as such is *eminently* one of *changing proportions*, comprising, first, its growth, second, its decadence, and, lastly, its entire removal, in rapid succession, and that this changing character in volume and pressure is most important as exercising an influence upon the natural course of the symptoms, upon prognosis, and as influencing or governing the indications for its rational treatment.

It may again be referred to here, and as a unique feature, pathologically, of this process, that, considering the degree and extent of the action, its acute course, amount of exudate, and the dangers it involves, it should cause no sequelæ beyond debility, both local and general, which, consider-

ing the duration of the action, is most marked. The functions referred to as involved, and more or less (some dangerously) jeopardized, are the circulatory, the respiratory, the nutritive, the sthenic, the excretory, and the nervous.

The circulatory function is especially affected by the morbidly deranged condition set up. (a) From an *obstruction*, and more or less complete inhibitory stoppage of the great systemic current of the blood in the pulmonary division of its course; (b) from a consequently deranged distribution of its blood-volume; and (c) from an equally deranged resulting local blood-pressure. The obstruction created results from direct and indirect causes: To the extent of the local process, which, as we shall see, so far entirely closes the pulmonary capillaries, it is direct; to the extent that the remaining pulmonary capillaries are inadequate to circulate the volume which arrives by the afferent vessels, it is indirect. The indirect obstruction will, therefore, where the volume of the blood is equal, be inversely in proportion to the local process.

Because of this obstruction of the systemic circulation at this point, a local aggregation of blood occurs upon the proximate side of the obstruction, which quickly results on account of the rapidly incoming blood in a markedly oppressive hyperæmic condition, a congestive fullness or distension, which, as the blood collects, sets back upon or in the venous tract. On the contrary, and for the same reason, upon the distal, efferent side of the obstruction there results a corresponding anæmia. This local morbid fullness resulting upon the one hand, and the corresponding anæmia upon the other, which is continued in degree throughout the arterial system, constitute the deranged volume referred to, and equally set forth or imply the derangement of blood-pressure which is thereby created.

This deranged distribution volume is readily appreciated clinically in the empty pulse which is characteristic of the process, and in the venous congestion which is plainly apparent. The results of the deranged pressure will be pointed out later. The obstruction created varies with the varying stages of the developing local process, and also according to its final extent; it depends, furthermore, upon the resulting competency, or, on the contrary, the resulting embarrassment, of the collateral circulation.

In the inception of the process it is slight, its extent being only equal to the lumen area of the capillaries, which have become insufficient. As the process extends, however, through increasing functional (collateral), and, later, organic capillary insufficiency and consolidation, the obstruction also and equally extends and becomes more perfect; and if now the lung capillaries are further oppressed by an excited, morbidly developed, and adequate circulatory pressure, it may at any moment, in a full-blooded subject, amount to a dangerous inhibition, especially at a time just prior to the completion of an extensive consolidation.

The local fullness, hyperæmia, and resulting pressure in the circulatory vessels, may not only cause great vascular stress, but are liable to cause right cardiac insufficiency while they remain. The symptom of cardiac diastolic murmur present in pneumonia results from this cause; and a pulmonary inhibiting stress of pressure, in greater or less degree, is to be

attributed to the same condition. Furthermore, an obstructive filling of the afferent veins with carbonized blood, setting back, especially upon the brain, with pressure, may dangerously inhibit nervous action, and is, undoubtedly, the cause of the mental state of lethargy, oppression, anxietas, or delirium which may be present.

The respiratory function is not less jeopardized by the derangement and greater or less inhibition of its organs, the lungs. This derangement is often the cause of sudden death early in this disease. The pulmonary hæmotosic inhibition is due (a) to the consolidation of a portion of the lung structure or its antecedent condition, congestion; (b) to a resulting congestion and possibly œdema of the remaining lung structure, from collateral action of the blood, and the pressure and pulmonary functional injury resulting therefrom; (c) to a morbid pressure, both lateral and direct, developed on account of the afferent filling with the incoming blood; and, lastly, to an excessive increase of weight due to congestion and exudation. To the extent of consolidation the hæmotosic function is completely inhibited; furthermore, according to the degree of collateral congestion, and especially structural œdema, the remaining capacity of the organ for aërating the blood is interfered with. And the working of the organs, chemically and as an aid to the circulating blood by suction, is further impeded by the great additional weight of blood and exudate to which they are subjected; also by the pressure which is created, as will be more fully specified hereafter.

In addition to what has been said in reference to the results of fullness and pressure upon the nervous condition, this function is still further depressed and its action impeded by the effects of the process upon respiration and nutrition. The obstruction which is created or results, occurring just before the hæmotosic function is performed, leads to a great fullness—hyperæmia—of carbonized depressing blood, and a corresponding anæmia of arterialized, stimulating blood. From a consequent need of the latter, and, on the contrary, because of the depressing, anæsthetizing presence of the former—especially as the cerebral circulation *requires* and *receives* so large a proportion of the entire amount of the blood—nervous action is further depressed. Also, on account of the imperfect nutrition which results, this function still further suffers.

General nutrition suffers while the obstruction and local process remain: (a) on account of the resulting small quantity of oxygenated blood which is sent out to supply the organic needs; (b) because the blood which becomes arterial is still imperfectly oxygenated, and is deficient in elaborated nutritive properties or materials; and (c) because digestion is largely inhibited while the obstruction remains. As one result of the arterial anæmia which is created, the gastric and intestinal functions are not adequately stimulated; hence we may account for the well-recognized symptoms, anorexia and constipation, which are present. Furthermore, there result such apeptic conditions as prove inadequate to digest the little food which may be taken. This inhibition of the function of the principal organ of nutrition works serious harm to the entire function; but intestinal and glandular pepsis is not less inactive, and so far

increases the difficulty. The excretory functions also suffer from the same cause; owing to the diminished amount of arterial blood, constipation exists, and the urinary excretion is noticeably lessened.

Exhaustion occurs, therefore, with singular rapidity in this disease as compared with the same result in other maladies, and it constitutes a dangerous complication, which should not be overlooked. This fact of early exhaustion in pneumonia is of importance in affording an influencing indication for treatment, namely:

In the early stages, for conservative medication, rather for such treatment as shall restrain organic action, and, as far as possible, prevent unnecessary and harmful waste of vital force; in the later stages, for an opposite course, a liberal, active, and efficient tonic and supporting regimen.

(To be concluded.)

Book Notices.

A System of Surgery, Theoretical and Practical, in Treatises by Various Authors. Edited by T. HOLMES, M. A. Cantab., Surgeon to St. George's Hospital, etc., and J. W. HULKE, F. R. S., Surgeon to the Middlesex Hospital, etc. Third edition, in three volumes, with illustrations. New York: William Wood & Co., 1883. Pp. xxxi-1,109; xxiv-964; xxix-942.

First Notice.

It was indeed time for another edition of this well-known work if its editor wished it to retain its place among the standard surgical text-books. Twelve years of advances in surgery leave a book far behind, and the last twelve years especially have been full of new facts and theories. The authors are compelled to acknowledge that even during the year which has been consumed in revising and printing this edition new matter has been added to surgical literature which can not be found in the book. The object of the present edition is to bring the book up to date. Many of the original contributors have passed beyond the field of work, and their pens have been seized by younger hands. Of the remainder, some have rewritten their chapters, and others have left them nearly as they were; but the work practically comes before the reader as a new one, and will be regarded as such. We notice in passing that the five volumes of the second edition have, in the third, been compressed into three; and that much additional matter has of necessity been added. This necessitates a change in the general appearance of the book, and, though the reader may miss the clear type and ample leading of the old edition, he will be compensated by the great reduction in price, which the close printing on cheap paper has rendered possible.

The first volume contains over eleven hundred pages, and is divided into the following chapters: Chapter I. is on Inflammation, and is written by John Simon. (Unfortunately, his name has been entirely omitted from the list of authors, published on p. 29.) The second article is also on Inflammation ("The Pathology of Inflammation"), and is by J. Burdon Sanderson. The first is on the pathology and treatment; the second is on the pathology and ætiology. Why this peculiar arrangement? On page 18 we have the causes of inflammation by Simon, and on page 82 we have the same thing by Sanderson. On page 3 we have "The Symptoms of Inflammation," by Simon, and on page 75 "The Objective Signs of the Inflammatory State," by

Sanderson. How well the different expressions for the same thing represent the differences in the style of writing by the two men! In fact, the original article in the first edition was written by Simon. In the second edition a part of it was cut out, and replaced by the article by Sanderson in vol. v. In the present edition the two have been brought side by side, Simon's remaining unchanged. The two, as they now stand, make a very complete though awkwardly arranged chapter on the subject, the part by Sanderson being intended to supplement that by Simon.

The succeeding article is on Abscess, originally written by Holmes Coote, and now rewritten by H. T. Butlin—or, rather, we do not know exactly who rewrote it. The table of contents says Butlin; it is signed W. Harrison Cripps. On further investigation, it seems to be Butlin, for we find him credited with it in the "list of authors"; but we can not be sure, for Cripps's name is signed to the next article, on sinus and fistulæ; but he is not credited with it in the list of authors and their contributions. The question as to who spent a year's time in correcting this proof is so obviously appropriate that we are inclined to omit it. The article itself is good. It deals not only with abscess in the abstract, but with the differential diagnosis and with the different varieties. Cervical abscess, abscess in the abdominal wall, mammary abscess, and suppuration in the palm, are studied in detail, with the treatment suitable for each.

The next article, on Sinus and Fistula, was originally written by Paget, in 1870, and, as we say, bears the signature of Cripps, in 1882. It is short (only five pages), and is devoted chiefly to the causation and treatment.

The next essay is on Gangrene, and is credited to its author, Cripps, all around. It replaces the article by Holmes Coote in the previous editions. The author divides gangrene into four classes: idiopathic gangrene, frost-bite, traumatic, and specific septic gangrene, and handles the whole subject in a concise, scholarly way, which makes very enjoyable reading. We notice only the omission of what Moore, of Rochester, has so well described in Ashhurst's "Encyclopædia" as "white gangrene."

The chapter on Uleers, originally written by Paget, has been edited by Butlin, with slight alterations of the parts and a rewriting of the part relating to rodent ulcer. It is, we are glad to see, the same old classical chapter in the main, with the imprint of its author still plainly upon it.

The essay on Erysipelas was originally written by the late Campbell De Morgan, and has been revised by Holmes. The disease is clearly divided into its several forms, from an erythema to a diffuse cellulitis, and each is dealt with in detail. The remarks on contagiousness and treatment are especially valuable.

Pyæmia and Septicæmia are handled by Clutton in less than eleven pages. The essential difference between them is found in the presence of secondary inflammatory centers. Little is said of their ætiology, except that they are both due to absorption of the products of putrefaction—the product being probably different in the two cases; but the author deals quite freely with the results of experiments on animals with bacteria, though he believes they need further confirmation. A vast amount of theory has been worked down in these few pages to its ultimate conclusion, with the result of saving much time and useless reading to the student.

In the essay on Hæctic and Traumatic Fever and the After-Treatment of Operations we notice that the interesting point of the ætiology of traumatic fever has been dealt with in very few words: First, bacteria; second, tension; third, nerve disturbances. The article is written by John Croft.

Tetanus, by the late A. Poland, revised by J. W. Hulke, is compressed into ten pages. The authors have little faith in any

remedy, believing the disease to be self-limited, and that the powers of the patient must be supported in every way possible. They quote, however, a number of opposite opinions, referring with especial favor to the extract of physostigma, hypodermically administered in doses of one sixth of a grain.

Delirium Tremens, by Dr. Barclay in 1870, has been rewritten by Warrington Haward. It comprises less than six pages, but all is given that is known as to pathology, and all that is of value in the diagnosis and treatment.

Mr. Savory's article on Scrofula in previous editions has been replaced in the present by one by Fred. Treves. It is, as it stands, one of the best in the book, and is illustrated by several microscopic drawings of scrofulous glands. The relations of scrofula and tubercle are discussed at length, as is also the nature of tubercle. The relation of scrofula to phthisis is considered, and much space is devoted to ætiology, as well as to the histology of scrofulous glands.

Savory's article on Hysteria has been edited by Holmes, and Paget's on Tumors has been rewritten by Butlin. This latter covers forty-eight pages, with numerous illustrations. Passing rapidly over the chapters on Contusions and Wounds, both originally written by Paget and now revised by Croft, we notice simply the introduction of Mr. Lister's account of antiseptic treatment, which, in the second edition, was to be found under the head of amputation. The article on Animal Poisons, by the late A. Poland, is now by W. Anderson, and that on Wounds of Vessels, by the late Charles H. Moore, has been edited by Holmes. The chapter on Hydrophobia is entirely from the pen of Mr. Anderson, and is very complete. The disease in the lower animals is first fully described, and then the disease in man. As a whole, the article is the most satisfactory of any we now recall upon this subject, as are also those on Glanders and Foot and Mouth Disease. Under the head of Wounds of Vessels the editor has first considered hæmorrhage, the hæmorrhagic diathesis, and the treatment of hæmorrhage, including transfusion. The chapter is a purely general one, and does not include the wounds of special vessels and the operations necessary for their relief.

The first part of the work closes with Mr. Savory's article on Collapse, and the general effects of shock upon the system. When the reader considers that this first part covers less than 400 pages of the first volume, and that there are three volumes of about 1,000 pages each, some idea of the enormous amount of material gathered together may be gained.

Part II includes Burns and Scalds, and Accidents by Lightning, by the Editor; The General Pathology of Fractures, by Hornidge, rewritten by W. H. A. Jacobson; The General Pathology of Dislocations, by the Editor; and Gunshot Injuries, by Surgeon-General Longmore. The chapter on burns and scalds is exhaustive, while that on fractures includes everything except the treatment of the special varieties. The process of union is particularly well described and illustrated, and non-union and vicious union are both ably treated. The chapter on Dislocations, by the same writer (Holmes), is of necessity much shorter, but is equally good. Over 100 pages are devoted to Gunshot Injuries in all their special varieties.

Part III is devoted to Injuries of Special Regions. The head, neck, face, back, chest, abdomen, pelvis, upper extremity, and lower extremity, each has a special chapter, and we notice the names of some new contributors. Prescott Hewett's work has been edited by Hulke, Shaw's has been rewritten by Jacobson, who has also supplied the place of the late Holmes Coote in the article on the face. Mr. Lyall, who edited the work of the late Alfred Poland on the Chest, also died while his work was going through the press.

In passing over this mass of matter, which ends the first vol-

ume and which includes the special fractures and dislocations, we will refer especially only to the excellence of the articles on fracture of the spine, trephining the spine (with a table of 130 cases), concussion of the spinal cord, injuries of the neck, wounds of the heart, foreign bodies in the heart (with a table of forty-seven cases), and rupture of the various organs. From so much good matter it is difficult to select the best.

A Practical Treatise on Impotence, Sterility, and Allied Disorders of the Male Sexual Organs. By SAMUEL W. GROSS, A. M., M. D., Professor of the Principles of Surgery and Clinical Surgery in the Jefferson Medical College of Philadelphia, etc. Second edition, thoroughly revised. With sixteen illustrations. Philadelphia: Henry C. Lea's Son & Co., 1883. Pp. viii-17 to 176, inclusive.

WE congratulate the author upon his ability to say that "the rapid exhaustion of a large edition of this work, the favorable comments which it has received from the periodical press, its translation into the Russian language, and the fact that it has been out of print for several months, constitute valid evidence that it has filled the void for which it was originally designed."

Observations on Lithotomy, Lithotripsy, and the Early Detection of Stone in the Bladder, with a Description of a New Method of Tapping the Bladder. By REGINALD HARRISON, F. R. C. S., Surgeon to the Liverpool Royal Infirmary, etc. London: J. & A. Churchill, 1883. Pp. 71.

MR. HARRISON'S little book will be read with interest by Americans, chiefly for the sake of the author's intelligent appreciation of Bigelow's operation, which he was among the first to advocate in England. The work includes also an account of the author's method of tapping the bladder through the perineum and prostate.

Correspondence.

LETTER FROM VIENNA.

The Advantage of the Summer Courses.—Two Cases of Rupture of the Uterus.—The Use of Salt Solution in "Transfusion."—Gastro-enterostomy for Cancer of the Pylorus.—Resection of the Pylorus.

VIENNA, September 15, 1883.

WITH the advent of cool weather, Americans are flocking here from all quarters to begin their winter studies. New courses are opening each week, and no one need complain of a dearth of occupation, although it is still two weeks before the opening of the semester.

The advantages enjoyed by those who remain in Vienna during the summer were mentioned in a former letter, and they are proved by a comparison of the courses now in progress with those of a month ago.

A class in operative obstetrics which then numbered ten is now increased to thirty—which means a decided decrease in the amount of personal attention given to each individual by the instructor. This disposition on the part of some of the assistants to increase the number of their students to such a degree that the *financial* element seems to be the only one taken into consideration has already been alluded to. Unfortunately, the

number of really limited classes now is small, and profitable special studies must be pursued in small private classes at a heavy expense.

In the lying-in wards the advantages enjoyed by the individual are lessened in a corresponding degree by the autumnal influx of students, so that I question if a foreigner would not find that two months devoted to obstetrics in the summer repaid him better than an entire winter semester spent in jostling among a crowd of equally eager competitors, each anxious to purchase the favor of the assistants.

There are not usually so many interesting cases during the vacation, but the student will have ample opportunities for that personal observation of the phenomena of labor which is of the highest practical value to the physician. While referring to the subject of obstetrics, it may be of interest to recall two cases of rupture of the uterus which have occurred in Braun's wards during the past three weeks. In both instances the patients were brought to the hospital in a state of collapse some time after the accident. In the first case (a neglected transverse presentation) the foetus had partially escaped into the abdominal cavity. Turning and extraction were promptly effected, and two large drainage-tubes were introduced into the cavity through the rent in the posterior uterine wall, their ends being allowed to protrude from the vagina. No other treatment was employed except the use of morphine and ice-compresses (the latter being considered here the best prophylactic against peritonitis). The patient has completed her third week without a bad symptom. The second patient was brought to the hospital yesterday in a moribund condition after ineffectual attempts had been made to deliver by the high-forceps operation. Turning and extraction were performed with difficulty, owing to a narrow anterior conjugate. The woman died a few minutes later, in spite of attempted restoration by transfusion. At the autopsy an extensive rupture of the left lateral wall of the uterus was found extending through the cervix and vagina.

It may not be known to all of your readers that in "transfusion" (an operation in poor repute in the Vienna school) blood is no longer employed here, but a weak salt solution, which is found to be quite as effective, and may be kept always at hand. You will pardon me for devoting so much space to this subject. I mention it not only to show the wide range of rare and interesting cases which are met with here in a short time, but because, as a spectator, I have been impressed with the promptness with which formidable complications are recognized and treated, even by the youngest assistants.

Dr. Wölfler (Billroth's assistant) recently attempted a resection of the pylorus for carcinoma, but the disease had advanced to such an extent, and there were so many adhesions to surrounding organs, that the intended operation could not be completed. A fistula was established in the stomach and united to a loop of the small intestine, with the hope of establishing a permanent connection. The patient survived only a few hours. The same operation is to be repeated this week. In spite of the unsuccessful termination of most of the cases of resection of the pylorus, the operation seems to be gaining ground, though not regarded with much favor by physicians of a non-surgical tendency. It will be conceded by the most enthusiastic surgeon that it is much easier to diagnose carcinoma of the pylorus than to distinguish between cases in which operative interference is and is not justifiable. There are patients now in the medical wards who are regarded as candidates for the operation in the future, so that it is likely that I shall be able to report additional cases during the winter.

In my next letter I hope to be able to give some interesting facts in connection with the regular work of the semester, which begins on the 1st of October.

THE
NEW YORK MEDICAL JOURNAL,
A Weekly Review of Medicine.

Published by
D. APPLETON & Co.

Edited by
FRANK P. FOSTER, M. D.

NEW YORK, SATURDAY, OCT. 6, 1883.

MEDICAL EDUCATION IN AMERICA AND IN GREAT
BRITAIN.

SOME weeks ago "A British Practitioner Resident in the States" unburdened himself in the columns of the "Lancet" on the subject of certain ameliorations of the status of American graduates that it was thought would result from the operation of the new British medical bill. He scarcely attempted to disguise his horror at the reflection that the graduates of American medical schools were in the slightest degree likely to meet with any sort of consideration in Great Britain. Somewhat after the manner of the conventional British tourist, he proceeded to picture the low state of medical education in "the States." Such a course is well known to be eminently soothing to the English mind, and in this instance there can be little doubt that the satisfaction gained by the writer was most decided, for, besides freeing his mind, he was patted approvingly on the back by the editor of the "Lancet," and, although his depreciatory statements have been denied by various correspondents of the same journal, and the utter lack of substantial foundation for his inferences has been abundantly demonstrated, he still basks in the sunshine of editorial favor.

So gross are his misrepresentations that "Another British Practitioner Resident in the States" has felt impelled to contradict them in the "Lancet," whereupon our contemporary is moved to append this editorial note: "We can only say that, if, as our correspondent asserts, 90 per cent. of the American students can pass such an examination as the matriculation examination of the University of London, it is a pity they have not the opportunity of doing so, both for their own sakes and the reputation of American degrees, which can not be respected abroad so long as the guarantees of preliminary education are withheld and short curricula are the rule." In other words, no American graduate can be "respected abroad" so long as the greater number of the medical schools in this country do not furnish the guarantees in question, no matter how exacting may be the school from which he has received his degree, or what may be his own attainments.

Strictly construed, to be sure, the "Lancet's" remarks apply only to the degree, and not to its possessor, but the fact remains that they include all American degrees, without any attempt to discriminate between institutions of a high grade and those in which the requirements are lax. Still, illogical as such sweeping condemnation seems to be, it could in itself scarcely lead to practical injustice, for, as we look at the matter, no degree is entitled to a great amount of respect, whether it emanates from an American or from a European school. Asses are to be found in every alma mater's brood.

The British are perfectly right in refusing to recognize an American degree as a qualification for practice, and we are unjust to ourselves in not declining to accord the same recognition to an English degree. It seems only a question of time when British practitioners "resident in the States" will be practitioners only by virtue of an American examination. Perhaps then they at least, if not their countrymen at home, will be a trifle less given to reproaches of the sort alluded to.

A POINT IN THE PROGRESS OF THERAPEUTICS.

WHATEVER encouragement there may be to the medical profession in contemplating the steady decrease of the general death rate of late years, the practical mastery attained over the great pestilential diseases of bygone times, and the increasing recognition accorded by the public to the earnestness and intelligent character of our efforts to prolong the average duration of human life, there are other considerations upon which, although they may be less striking, physicians may found a just sense of satisfaction with the practical working of their craft. Not the least of these considerations is the reflection that the practice of medicine tends constantly toward the greatest possible amelioration of the sufferings, and even the minor discomforts, that to some extent are still inseparable from the state of sickness.

It is within the memory of those now in active life not only that the course of medication thought necessary in their childhood was annoying, disturbing, and often even prostrating, but that the restrictions put upon them in respect to their eating and drinking, to say nothing of the other features of their daily life, were in many instances harder to bear than the arrangements incident to the disease. The worst of it was, that much of the harrowing enginery of the past was in no wise inimical to the continued progress of the morbid condition from bad to worse. Indeed, the man would be bold who should affirm that it was not in many cases directly contributory to such progress. It is not pleasant to reflect that in old times—and not so very old—men were made miserable with the result of increasing their chances of speedy burial; and that this grim fact was the most prominent fruit of centuries of devotion to the study of the laws of health and disease. We may comfort ourselves with the thought that our fathers were led into these errors by faulty methods that we have now abjured—mainly by enslaving their observation at the behest of authority.

Among the most gratifying features of the modern way of managing disease is the consonance of attempts to make patients comfortable with the real agencies at work for their restoration to health. A contributor to our last issue calls attention to one of the more important of these attempts—the free use of water in the dietary of young children. The arguments presented by Dr. Remsen, and the facts that have led him to bring them forward, are such as must command the earnest attention of our readers. There are few restrictions, whether in health or in disease, more vexatious than a limitation set upon the amount of water one is at liberty to drink

—amounting often, in the case of infants, to a total prohibition. Since there seems good reason to suppose that this enforced deprivation is as damaging as it is annoying, and since there can be no question that those morbid conditions are very rare in which the unrestricted use of water is injurious, there can be no doubt that the hint given by our contributor will be borne in mind by many a practitioner who might otherwise have overlooked the matter for years.

THE PHYSICIANS' MUTUAL AID ASSOCIATION.

DR. REESE, of Brooklyn, whose labors in behalf of the association have been so effective, spoke with wisdom when on a recent occasion, while advocating the enterprise before his fellow-members of the Medical Society of the County of Kings, he laid stress on the benevolent aspect of the association's work and refrained from recommending it as a cheap form of insurance. We have heretofore spoken of the matter in much the same strain, for it seems not only disingenuous toward those who contemplate membership, but really injurious to the prospects of the association, to represent it to be what it is not. Many an organization of like objects in so far as the insurance element is concerned has been wrecked on the shoals of disappointed expectations. To maintain that any voluntary society of the sort can compete in the matter of cheap insurance rates with the great corporations that make the business of life insurance a study is to assert what can not stand the test of investigation, and whoever becomes a member of such a body under the delusion in question is sure to become lukewarm if not discontented when the facts open his eyes.

The prosperous course of the association, to which we have taken pleasure in calling attention on several occasions, is doubtless due in great measure to the avoidance of the illusory pretensions alluded to. Its managers have been abundantly justified in setting forth certain advantages which do accrue to members, such as the promptness with which the amount due the family of a deceased member is forthcoming, but, so far as we have observed, they have never failed to put all the benefits of membership in their true light.

THE NEW MEDICAL COLLEGE IN BUFFALO.

In this age of the multiplication of medical colleges it is not often that an institution of the sort starts with so many praiseworthy features, and with so great an earnest of success, as the Medical Department of the University of Niagara. It is true that the idea seems to be entertained in some quarters that the legal formalities involved in its organization are defective, but of this we have seen no satisfactory evidence. The connection of the school with the university is probably closer and more real than is commonly the case in this country with medical schools that are ostensibly departments of universities; the parent institution seems to be on a firm financial basis; and the faculty of medicine must certainly be called a strong one on the whole.

We do not suppose that another college was at all a mat-

ter of necessity to Buffalo, but that is a consideration that may properly be urged in the case of many other cities. Competition would doubtless stimulate to the highest order of medical teaching in the United States, were it not allowed to degenerate into a race between a great many colleges as to which of them can so level the rugged paths of learning, and in every way so facilitate the transition from the plow-boy to the doctor, as to lure the greatest number to its arms. Since, with practically very few exceptions, the degree granted by one college is as good as that from any other in the eyes of the law, and, for that matter, before the community, and since almost any coterie of physicians may effect an organization that shall constitute them a medical college empowered to grant the degree, there is little hope that competition will accomplish any more good than that of raising the quality of the training that is to be had by the few who are resolved to get the best attainable education. Until some other ordeal is imposed than college examinations as the test for admission to the profession, it is useless to expect any marked change in this state of things. But this very fact makes it all the more a matter of congratulation when a new college aims not so much to win students as to deserve a good repute; and, from all we can ascertain about the new college in Buffalo, such is the course upon which it seems to be entering. From the character of its faculty, and from the tenacity of purpose usually manifested by institutions governed as the university is governed, we do not doubt that the Medical Department of the University of Niagara will take a high stand among our medical colleges.

MINOR PARAGRAPHS.

THE MEDICAL SOCIETY OF THE STATE OF NEW YORK.

THE President of the society, Dr. Alexander Hutchins, of Brooklyn, has issued a circular in which he very properly calls attention to the fact that the Business Committee, not being appointed until the opening of the meeting, can not be expected to charge itself with more than arranging the order of business for the time being. He therefore asks the personal co-operation of the delegates and members in providing papers for the meeting, and requests that the titles of the same, with the authors' names and addresses, be forwarded to him as early as practicable. A general compliance with the President's requests ought certainly to be made, and, if that is done, we may look for a meeting of unusual interest.

THE HEALTH OF CONNECTICUT.

By a late report from the Secretary of the Connecticut State Board of Health, it appears that zymotic diseases were quite prevalent during the month of August, causing a mortality amounting in some instances to nearly fifty per cent. of the entire mortality. Particular attention is called to the prevalence of typhoid fever, and it is stated that diphtheria shows no abatement in Hartford.

NEWS ITEMS.

INFECTIOUS DISEASES IN NEW YORK.—We are indebted to the Sanitary Bureau of the Health Department for the following statement of cases and deaths reported during the two weeks ending October 2, 1883:

DISEASES.	Week ending Sept. 25.		Week ending Oct. 2.	
	Cases.	Deaths.	Cases.	Deaths.
Typhoid fever.....	84	12	86	11
Scarlet fever.....	29	2	26	8
Cerebro-spinal meningitis....	7	5	2	3
Measles.....	4	2	11	4
Diphtheria.....	17	12	41	16

MALIGNANT SMALL-POX IN MEXICO.—Information was received on the 1st inst., by the Surgeon-General of the Marine-Hospital Service, that malignant small-pox was raging in Tapachula, State of Chiapas, Mexico. Twelve hundred deaths had already been reported. The town has a population of about ten thousand.

THE INFECTIOUS DISEASES OF CATTLE.—On the 15th and 16th of November a conference of persons interested in the matter will be held in Chicago, to consider the extent of prevalence of these diseases in America and the best means of preventing them.

THE FOOT AND MOUTH DISEASE is said to be prevailing to an alarming extent in many of the counties of England.

THE FRENCH CHOLERA COMMISSION.—We regret to learn that one of the members of M. Pasteur's commission, M. Thuillier, has fallen a victim to the disease.

THE PHILADELPHIA HOSPITAL.—On Tuesday the medical staff adopted the following:

Whereas, There exists in the Philadelphia Hospital a great and imperative need for wards specially planned and constructed for the care of lying-in women; therefore,

Resolved, That the medical staff of the Philadelphia Hospital do most respectfully and most urgently request the Select and Common Councils of the City of Philadelphia by enactment promptly to authorize the Guardians of the Poor to construct without delay the Maternity Pavilions, as has been recommended by the Board of Guardians of the Poor to the Finance Committee of City Councils.

AN ALLEGED NUISANCE AT GLEN COVE, a starch and glucose factory, was lately inspected by a committee of the State Board of Health. The singular statement is made that 234 citizens had petitioned for the abatement of the nuisance alleged to be due to the operation of the factory, while 513 presented a counter-memorial asking that no notice should be taken of the petition.

THE COLLEGE OF PHYSICIANS AND SURGEONS.—The winter session was opened on Monday evening by an introductory address by Dr. George H. Fox, Clinical Professor of Diseases of the Skin.

THE MONMOUTH COUNTY, N. J., MEDICAL SOCIETY.—We learn that the following-named gentlemen were elected officers at a meeting held at Freehold on Monday: Dr. Edward Field, of Red Bank, president; Dr. C. D. W. Vandyke, of Perrineville, vice-president; Dr. D. M. Forman, of Freehold, secretary; and Dr. I. S. Long, of Freehold, treasurer.

THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF VERMONT.—It is announced that Mr. John P. Howard intends to give an additional sum of money to the university, part of which is to be devoted to a new building for the Medical Department.

GUY'S HOSPITAL, LONDON.—A refreshment-room has lately been established for the students' convenience. A like action on the part of our own colleges would undoubtedly prove of great benefit.

THE AMERICAN ACADEMY OF MEDICINE will meet at the New York Academy of Medicine on Tuesday, October 9th (three

o'clock), and Wednesday, October 10th. The address by the President, Dr. H. O. Marcy, of Boston, will be delivered on Tuesday evening, October 9th, at eight o'clock, on "The Recent Advances of Sanitary Science; the Relations of Micro-organisms to Disease" (illustrated by micro-photographs projected upon the screen). The following papers have been promised for the general meetings: Dr. L. S. Pileher, of Brooklyn, N. Y., on "The Relations of Medical Journalism to Higher Medical Education in America." Dr. Traill Green, of Easton, Pa., on "The Imperfection of Technical Studies as a Means of Mental Culture." Dr. Benjamin Lee, of Philadelphia, on "The Value of an Acquaintance with Botany as a Preliminary to the Study of Medicine." Dr. Charles McIntire, of Easton, Pa., "Is it Fair? The Study of the Comparative Political Position of the Medical Profession in the United States." Dr. A. D. Rockwell, of New York, on "The Exact Value of the Electrolytic Method." Dr. J. Cheston Morris, of Philadelphia, "The Milk Supply in Large Cities." Dr. Charles E. Cadwalader, of Philadelphia, "Considerations upon the Public Provisions for the Care of the Indigent Insane." Dr. A. D. Rockwell, of New York, "The late Dr. George M. Beard—a Sketch." Report of the Committee on Laws of Medical Practice in the United States and Canada (Dr. Dunglison and Dr. Marcy).

OBITUARY NOTES.

JAMES A. FLEMING, M. D., OF BOSTON.—Dr. Fleming died in the Massachusetts General Hospital on Sunday last of typhoid fever contracted while on duty at the State muster. He graduated from Harvard Medical School in 1875, and was for over a year connected with the medical staff of the Boston City Hospital. He was surgeon of the Ninth Regiment of Volunteer Militia at the time of his death.

PROFESSOR COLONICATTI, OF TURIN.—Dr. Vittorio Colonicatti, professor of pathological anatomy in the University of Turin, died recently, at the age of thirty-five.

Letters to the Editor.

THE PROPOSED AMENDMENTS TO THE CONSTITUTION AND BY-LAWS OF THE ACADEMY OF MEDICINE.

To the Editor of the New York Medical Journal:

SIR: I have received a printed postal circular, apparently signed with some of the most distinguished and honored names of the profession in this city.

I know not how generally this circular has been sent to the Fellows of the Academy, as I have seen but one other copy, but, as it refers to a circular which I have sent to every Fellow, I deem it necessary to say that I think it bears evidence on the face of it that it is a silly, not to say a cruel hoax. I will give my reasons for this belief, which, I think, are conclusive:

1. When introducing the resolutions which have caused all the disturbances in the Academy of Medicine, the gentleman who moved them "deprecated the admission of any Fellow who could not cordially support the code of ethics of the American Medical Association." The resolution instructed "the Committee on Admissions to report to the Academy for election as Resident Fellow no physician who is known by the committee to be in opposition to this code of ethics," and these resolutions were "to continue in force until the American Medical Association shall have modified or repealed its code of ethics."

Afterward the same gentleman who moved the resolution stated: "The movement which many of us have gone into is to sustain the code of ethics of the American Medical Association."

The assertion, therefore, in the postal circular, that "the code has never been made a subject of discussion in the Academy by any in favor of upholding it," is exactly the opposite of the fact. It was really the gravamen of the whole discussion that memorable evening.

The higher the standing of men, the less they can afford to have their names appended to an intentionally misleading statement which the whole profession in this city and in this State know to be erroneous. I can have no doubt that many of those whose names appear on this circular will make haste to correct this error, and "rise to explain" by avowing, either that they never signed this paper, or that they did so hastily without reading it.

2. This postal circular asserts: "The resolutions presented and adopted at the last meeting of the Academy *had for their object* (the italics are mine) the prevention of any future discussion relating to the code."

This *was* the object of a resolution introduced one year before by Dr. Austin Flint, Sr., which was unanimously carried, and successfully accomplished its purpose until the resolutions of the last meeting of the Academy were introduced.

3. As those whose names appear on this postal circular are men of the highest intelligence and education, they never could have consciously signed a statement that the Academy "owes its origin" to "its time-honored constitution and by-laws," as, in the belief of most, this statement also is the opposite of the fact. It is generally supposed that the origin of the constitution and by-laws was in the Academy.

Yours truly,

FORDYCE BARKER.

October 3, 1883.

Proceedings of Societies.

NEW YORK ACADEMY OF MEDICINE.

A STATED meeting was held October 4, 1883, the President, FORDYCE BARKER, M. D., LL. D., in the chair.

[Before the meeting, the following circular had been sent to the Fellows by the President:

THE PRESIDENT'S CIRCULAR.—"I assume that every Fellow of the New York Academy of Medicine must regard it as a most unfortunate event that anything should occur to interrupt its fraternal harmony, its useful work, and its progressive growth. While we can not shut our eyes to the fact that this is the present condition of the Academy, it would be both useless and unwise to discuss the causes which have brought about this state of things, because, from their nature, they involve questions on which the most able, the most loyal, and the most conscientious men in the profession honestly differ. Let us accept this fact as inevitable, and that the Academy can do nothing which will effectively advance the interests of the profession by way of discussions, which irritate, but do not change convictions, or by arbitrary regulations, secured by shrewd tactics, but which carry no moral force.

"The Academy of Medicine is not fulfilling its mission when it is engaged in warm discussions of questions of casuistry, in polemical controversies, or in medical politics.

"The 'Ephemeris' of Dr. Squibb quotes with approval an editorial from the 'Boston Medical and Surgical Journal,' which contains the following sentence: 'The lesson also is so obvious that he who runs may read, that the more our societies confine themselves to their proper field—the joint cultivation of medical

science and good fellowship—and the less they meddle with medical politics, the better will it be for their own future and the common good of the profession.'

"It seems to me that the truth of the foregoing sentiment has been unfortunately, but clearly, demonstrated by our Academy of Medicine.

"The question which we have now to meet is: What measures can be taken to secure for the Academy a return of its prosperity? by which I mean a restoration of its fraternal harmony and good fellowship; a renewal of its active scientific work; an increase of its funds for the growth of its library and the adequate support of its journal department.

"Since our last meeting this question must have occupied the minds of all our Fellows who appreciate the importance of the Academy, which should represent the highest scientific work of the profession of this city. All must feel that the character of the profession and the grade of individual reputation are deeply involved in a wise settlement of this question.

"I trust that no one will suspect me of a wish to force my individual views upon the Academy, but that, in consideration of the experience which I have had in its affairs, each will understand the spirit in which I venture to offer a few suggestions to be discussed, amended, or improved, at our first meeting in October. I do not feel it necessary to apologize for expressing the hope and the belief that every Fellow of the Academy who feels a proper sense of his personal responsibility, and what he owes to the profession and the public, will be present, and contribute by his voice or his vote to a satisfactory adjustment of our present difficulties.

"It must be obvious to all that to attain this end we must make a new departure on certain questions, to which it is unnecessary to refer more definitely. There is an 'irrepressible conflict' of views and opinions which can not be settled by parliamentary tactics or a majority of votes, but must continue until in the progress of time the moral sentiment of the profession is crystallized in a public opinion which will have the force of law. No possible good can come from profitless and irritating discussions of these questions in the Academy of Medicine. It therefore seems to me of vital importance that now, in making a new departure, everything in relation to them should be buried in the past and forgotten. No unhappy differences can be settled, no principle or cause can be advanced, no society or individual can be benefited, by keeping up a galling wakefulness, and feeding the living ulcer of a corroding memory of the past. The anodyne draught of oblivion is the first specific remedy for healing such ills as those under which the Academy is now suffering.

"The next point to be secured is such a change in our organic laws as to make it impossible that trouble and danger can ever occur again in the Academy.

"At our first meeting in October, certain amendments to the Constitution and By-laws will be proposed for discussion, and at the following meeting they will be submitted to the vote of the Academy.

"Every change proposed has been the result of a most careful study of the subject, and has a distinct purpose, which will be obvious to all.

"I think it will be apparent that the whole intent of the proposed amendments is to make the Academy of Medicine a purely scientific society, independent of all other organizations; to place its standard of ethics on a higher plane than before; and to prevent the possibility of any future troubles by the introduction of matters foreign to its avowed objects."

Subsequently the Council of the Organization for upholding the National Code of Medical Ethics in the State of New York sent out the following circular:

THE NATIONAL CODE CIRCULAR.—The Council of the Organization for upholding the National Code of Medical Ethics in the State of New York begs to call your attention to a circular recently issued in which are proposed certain amendments to the Constitution and By-laws of the New York Academy of Medicine. The Council can not but regret the issuing of this circular as a covert movement, under a plea for harmony, in behalf of the organized effort in opposition to the National Code of Ethics. The proposed amendments, were they adopted, would eliminate from the Constitution and By-laws everything relating to ethics, and surrender the Academy to those who advocate the abolition of all ethical codes. The Academy would thereby be deprived of the right of representation in the American Medical Association, and of affiliation with other medical organizations out of the State of New York.

It may be assumed that there is no disposition, on the part of those who are for upholding the National Code of Ethics, to raise any discussion respecting the code in the Academy. The code has never been made a subject of discussion in the Academy by any one in favor of upholding it, and there is no ground for the supposition that it ever will be, unless it becomes necessary in the way of defense. The resolutions presented and adopted at the last meeting of the Academy had for their object the prevention of any future discussion relating to the code.

Every true friend of the Academy is earnestly requested to attend its meetings in order to resist the introduction of discussions and controversies in relation to ethics, by simply maintaining, in their integrity, the time-honored Constitution and By-laws of this institution, to which it owes its origin and prosperity.

(Signed) ABRAM DUBOIS, AUSTIN FLINT, AUSTIN FLINT, JR., J. W. S. GOULEY, JOHN H. HINTON, SAMUEL T. HUBBARD, WM. T. LUSK, SAMUEL S. PURPLE, T. GAILLARD THOMAS, *Council*.]

A PERSONAL EXPLANATION.—The meeting having been called to order, Dr. AUSTIN FLINT, Sr., rose to a question of privilege and asked leave to make a personal explanation. Reviewing the action of the Academy on two previous occasions, he affirmed that his action in both instances had been consistent and in the interest of harmony. The first occasion referred to was when the delegates to the Medical Society of the State of New York presented their report after the last meeting of the State society. It was true that he then, at the request of the President (and with entire heartiness, since it was in consonance with his own feelings), moved that the report of the delegates be accepted, and that its discussion be indefinitely postponed. This was done with the view of taking the agitation of ethical matters out of the Academy. On the second occasion, at the last meeting of the Academy, he had voted for the resolutions introduced by Dr. Austin Flint, Jr., and he had done so for the very reason that he believed their passage would have the same effect. Yet, he had since been repeatedly charged with inconsistency. These charges had been made freely and publicly—in the newspapers, in various medical journals, and in other ways. He hoped there would never again be a discussion of ethics in the Academy, either to-night or at any future time.

The PRESIDENT remarked that he had listened, and doubtless the Academy had listened, with great pleasure to Dr. Flint's explanation; and that he fully and cordially coincided with the sentiments expressed.

After reports by the Corresponding Secretary, the Statistical Secretary, and the Librarian, the President announced that a communication had been received from the Council, which he would ask the Secretary to read.

A COMMUNICATION FROM THE COUNCIL.—The communication related to the proposed amendments to the constitution and by-laws, and was to the effect that the Council disapproved of them and advised their withdrawal.

PROPOSED AMENDMENTS TO THE CONSTITUTION AND BY-LAWS.—The following proposed amendments were moved

by Dr. EDWARD L. KEYES, and seconded by Dr. ALFRED L. LOOMIS:

CONSTITUTION.—Article VI, Section I—Strike out: 2, A Committee on Medical Ethics; 3, A Committee on Medical Education.

Read: 1, A Committee on Admissions; 2, A Committee on Library.

[At present the clause in question reads: "1. A Committee on Admissions. 2. A Committee on Medical Ethics. 3. A Committee on Medical Education. 4. A Committee on Library."]

Article VIII.—Strike out the whole as it now stands.

Read: The Academy reserves the right of discipline by admonition, suspension, or expulsion, by which all rights and privileges as a Fellow are forfeited, for violation of its By-laws or Regulations, for unprofessional, ungentlemanly, or dishonorable conduct, and for public immorality and great crimes.

[The Article now reads: "The Academy reserves the right of punishing violations of its regulations, or of its code of Medical Ethics, by reprimand, suspension, or expulsion, and will recognize no Fellow as a regular practitioner who has been expelled."]

BY-LAWS.—By-law X—Strike out third paragraph in third sentence. Also strike out last sentence, for which read: Five members of the Council shall constitute a quorum for its ordinary meetings, but a majority of the Council shall be necessary for a quorum at its annual meeting in December, and at special meetings called by the President.

Add to By-law X, as follows:

SECTION 2. The Council, specially convened by the President for the purpose, shall have the power to inquire into any alleged infringement of the By-laws or misconduct by any Fellow of the Academy, on a written charge, signed by three Resident Fellows; and the Fellow whose conduct is in question shall be invited to attend. If, after investigation, the charges are sustained by a majority vote of those present, the Council may determine by a majority vote whether the punishment shall be a private admonition or a public reprimand by the President at a meeting of the Academy (whether the offender be present or absent), or suspension for a definite period.

But in case the charge is of so grave a character that the Council, by a vote of two thirds of those present, consider that the offender should be expelled, the report of the Council and its recommendations shall be referred to the Academy, of which due notice shall be given to every Resident Fellow four weeks previous to its final action. The vote shall be taken by ballot, and two thirds of those cast shall be necessary to sustain the vote of expulsion.

[The By-law now reads: "The Council shall supervise the general affairs and interests of the Academy; they shall provide suitable accommodations for its meetings, for its movable property, and for its business transactions; they shall estimate for the annual assessment, when at any time an increase thereof may be necessary; they shall annually, in December, audit the financial accounts, and oftener if deemed requisite; they shall authenticate and authorize the payment of all bills against the Academy not exceeding fifty dollars; they shall confer with the Trustees, the Treasurer, the other officers, and with the standing committees through the chairman of each, in reference to their respective functions and business relations; they shall appoint the Librarian, the Assistant and Statistical Secretaries; they shall nominate such Fellows as are to be appointed to deliver series of discourses or lectures on scientific subjects before the Academy, and also a Fellow to deliver the Anniversary Discourse; they shall determine the propriety of the reading of any paper offered by any person not a Fellow of the Academy; they shall select and recommend to the Academy for publication from the archives such essays, memoirs, or reports, as are to appear in the printed Transactions. All papers published in the Transactions shall be by a two-thirds vote of the members present."

They shall fix the prices of all publications offered for sale; they shall, by a two-thirds vote, fill all vacancies until the next annual election except of the President, Vice-Presidents, and the Trustees, which shall be filled by the Academy; they shall appoint all delegates to other societies when admissible; they shall superintend the printing and publication of all papers and volumes ordered by the Academy; and they shall once a year report in full to the Academy. A majority of the Council shall be necessary to constitute a quorum."]

BY-LAW XIII.—Strike out Section 3 as it now stands, and read as follows:

SECTION 3. The Committee on Admissions, upon receiving from the Recording Secretary the names of the candidates proposed for Fellowship, with their professional credentials, shall make due inquiry concerning them as regards their personal character, their standing in the profession, and their eligibility as persons of honor, who do not assume peculiar designations, implying special modes of treatment.

Add to By-law XIII, Sections 4 and 5, as follows:

SECTION 4. The Committee shall report within three months such as may be deemed worthy of admission, and, if for Resident Fellowship, the report shall specify the source whence the nominees derived their diplomas or license to practice, with the dates thereof.

SECTION 5. If this Committee fail to report within the time specified upon any nomination submitted to them, any Fellow of the Academy may renew such a nomination; and, if this be seconded, a vote shall be taken, it being distinctly stated that the nomination has not been approved by the Committee on Admissions.

[By-law XIII now reads: "SECTION 1. Each candidate for Resident Fellowship must be proposed in writing by three Fellows personally acquainted with him, and may be admitted at a meeting subsequent to his recommendation by the Committee. The recommendation of Corresponding, Honorary, and Non-Resident Fellowships from the Army and Navy must be at least one month before the Academy before the candidate can be admitted.

"SECTION 2. Admissions to Fellowship must be by a three-fourths vote of the members present at a stated meeting.

"SECTION 3. The Committee on Admissions, upon receiving from the Recording Secretary the names of the candidates proposed for Fellowship, with their professional credentials, shall make due inquiry concerning them, and all information thus obtained shall be confidential; they shall report within three months such as may be deemed worthy of admission, which report, if for Resident Fellowship, shall specify the source whence the nominees derived their diploma or license to practice, with the dates thereof; and should this committee fail to report within the time specified upon any nomination submitted to them, any Fellow having made such a nomination may renew the same directly to the Academy, and a vote shall be taken upon it; in this case, however, the affirmative vote of four fifths of the Fellows present, as ascertained by ballot, shall be requisite to insure an admission; and, on the question being put, it shall be distinctly stated that the nomination has not been approved by the Committee."]

Strike out By-laws XIV and XV; the subsequent By-laws to be numbered XIV, consecutively, to XXIV.

[By-law XIV now reads: "SECTION 1. The Committee on Medical Ethics shall hear all complaints of violation of medical ethics on the part of any Fellow, and decide all questions of medical ethics submitted to them by the Academy. They shall also notify to appear before them any Fellow of the Academy against whom any charge may have been preferred, and furnish him with a copy of the same; his accuser being also cited to appear, the committee shall proceed to take testimony and hear the defense, reserving their decision to be reported to the Academy at the next stated meeting, when their action may be affirmed by a majority of the Fellows present; but the vote of

three fourths shall be required to reverse the decision of the Committee.

"SECTION 2. Every charge against a Fellow of the Academy shall be made by a Fellow, and addressed to the Recording Secretary, under a sealed cover, with the words 'Charge against a Fellow' written upon it. The reception of such paper shall be announced to the Academy by the Secretary, who, after designating it by a number, shall hand the same over to the Committee on Medical Ethics.

"SECTION 3. It shall be deemed a chargeable offense to countenance, encourage, or patronize—by advertising, giving certificates, or in any other way whatever—an irregular practitioner, or the proprietor or vendor of any nostrum, patent, or quack medicine; or to commit any act which unfavorably affects the character of the Medical Profession.

"SECTION 4. A three-fourths vote of the Fellows present shall be necessary to expel a member.

"SECTION 5. All questions of Ethics in other respects shall, as far as applicable, be adjudged in accordance with the Code of Ethics promulgated by the American Medical Association and adopted by the Academy."

By-law XV reads: "The Committee on Medical Education shall have cognizance of the systems of medical instruction, private and public, in this city and State, as compared with such as are elsewhere in use. They shall recommend such improvements in office training and office examinations, in text-books, in reading and in practical studies proper for the student, and in the public courses, theoretical and practical, at the colleges and hospitals, as may seem to them in keeping with the advances of medical knowledge and the exigencies of the profession. They shall notice any evasion or infringement of the laws of this State that may come to their knowledge in reference to the granting of degrees. They shall make, in other respects, such suggestions as seem to them worthy of attention for rendering our systems of medical education thorough, efficient, and satisfactory. They shall report at least once a year to the Academy."]

By-law XXVI (new number as amended, XXIV)—

Add: And all resolutions, except such as relate to its formal routine business, must be offered in writing at the meeting two weeks previous to the final action, and printed on the notice of such final action.

[By-law XXVI now stands: "These By-laws may be suspended by a three-fourths vote at a stated meeting. They may be repealed or amended by a similar vote, provided notice of the same has been given in writing at a previous stated meeting."]

In presenting these proposed amendments, Dr. KEYES remarked that he had been asked to do so by the President, and that he did so willingly, not only as a recognition of the great services the President had rendered the Academy, but also because he saw in their adoption an easy solution of the difficulties with which the Academy was now surrounded, which difficulties would otherwise inevitably continue. He had always striven to live up to the old code, he was not a new code man, he had positively declined to join either party to the controversy now going on. It was therefore not in the interest of any faction, but wholly for the sake of peace, that he now offered the proposed amendments and moved their adoption as a whole. [Cheers.]

Dr. AUSTIN FLINT, JR., moved that the amendments take the usual course, and expressed the opinion that discussion on them at the present time was uncalled for.

Dr. ALFRED L. LOOMIS seconded the amendments introduced by Dr. Keyes, and said that he did so gladly, for he was fully convinced that by their adoption the greatest danger that had ever threatened the Academy would be averted, and we should ever after be freed from such occurrences as had taken place at the last meeting. For the Academy to maintain its prosperity and its prestige, all matters of ethics and medical politics must

be removed from it. [Cheers, at which the President requested that no more such demonstrations be made.] There were societies before which such matters properly came, but this was not one of them. The Academy was for scientific work and good fellowship, without fear of sharp tactics or bitter words. If the proposed amendments were carried, it would be impossible for any further disturbance of harmony to take place.

Dr. FLINT, Jr., disclaimed any desire to delay or obstruct the business of the meeting, but again urged that the amendments could not be acted upon to-night and ought not to be discussed. He renewed his motion, and it was now seconded.

Dr. M. H. HENRY spoke in support of Dr. Flint, Jr.'s motion, and begged to remind the Academy that about a year and a half ago Dr. Loomis had not seemed to stand in such dread of bringing politics into the Academy, for he had then come here and spoken in the interest of the County Democracy, the matter of street-cleaning being made the pretext. Dr. Loomis was then the chief orator, but now he was dreadfully afraid of politics. For his part, he (Dr. Henry) had had enough of these elaborately prepared orations by "stars." [Dr. Henry was repeatedly called to order during his remarks, and toward their conclusion hisses were heard.]

Dr. C. C. LEE moved, as an amendment to Dr. Flint, Jr.'s motion, that the meeting resolve itself into a committee of the whole, for the purpose of discussing the amendments. Seconded.

Dr. FLINT, Jr., protested that his motion could not be amended.

The PRESIDENT decided that Dr. Lee's amendment was in order. It was put, and declared carried. A division having been called for, the amendment was found to have been carried by a vote of 135 to 15.

The PRESIDENT then appointed Dr. Ellsworth Eliot chairman of the committee of the whole.

IN COMMITTEE OF THE WHOLE.—The CHAIRMAN appointed Dr. W. M. Carpenter secretary of the committee of the whole.

By request, the proposed amendments to the constitution and by-laws were then read by the Secretary.

Dr. LOUIS ELSBERG moved that when the committee rise it report to the Academy in favor of the proposed amendments as a whole. Seconded by Dr. C. F. Taylor. [Calls for question.]

Dr. D. B. ST. JOHN ROOSA thought fairness required that the President should have a chance to be heard as to his reasons for proposing the amendment.

The PRESIDENT had not intended to take part in the discussion on the amendments, but was anxious to hear any objections to them that might be raised in a full and fair discussion. Since the request had been made, however, he could not hesitate. He repeated his gratification at Dr. Flint, Sr.'s remarks. When, after the recent action of the State society, it was feared that its action on the ethical question would be brought into the Academy, Dr. Flint, this renowned physician whose fame was known wherever medicine was cultivated—this man whom he could not think of except reverently—had introduced a resolution to postpone the matter indefinitely. The resolution was carried unanimously, and had worked most successfully, until the action taken last spring, which had entirely changed the aspect of matters, and was, he thought, most injurious, imperiling the prosperity and usefulness of the Academy, inasmuch as it made two parties, the contention of which would keep out new members. He had, therefore, set about devising measures to undo the injury thus inflicted, and to guard against the possibility of further mischief of the sort. Without consulting anybody, but,

as the result of a careful study of similar large societies in Europe that were free from such dangers, including the Royal Society, the French Academy of Medicine, the British Medical Association, and various others, he had devised these proposed amendments to the constitution and by-laws. He did not believe that any one present would accuse him of any but the best motives. [Applause.] He had supposed that many of the prominent and honored men in the Academy, even among those who were in favor of upholding the old code, would join in supporting the measures which he had devised; but in this he had been somewhat disappointed. He had hoped that those gentlemen would see that the amendments were not in the interests of any ethical faction, but intended solely to promote the welfare of the Academy. He deprecated the distinction that had lately been made between the general principles of ethics and the code of ethics. [Dr. Barker then gave his particular reasons for each amendment. The chief points were that the Council was adequate to take care of the ethics of the Academy; that the Committee on Education had no function and no jurisdiction; that there should be one society free from all allegiance to other bodies, which allegiance had been made and argument in favor of the action taken last spring. The amendments would not vitiate the Academy's representation in the State Medical Society, for the present delegates remained members of the latter society until their terms expired; moreover, delegates would still be legal by virtue of the acts of incorporation of the Academy. As to the reduction of the quorum necessary in meetings of the Council, his object in recommending it was simply convenience, as it had often been found extremely difficult to assemble a quorum for the transaction of routine business. It would not, as had been feared, enable a few men to dispose of the Academy's property, for this could only be done by the Academy at large.]

Dr. FLINT, Jr., thought that every one present knew, before the President's explanation, precisely what the amendments implied—they struck out the code of ethics, and the other amendments had had to be made to correspond. The report of this Committee of the Whole would amount to nothing. It was simply impossible for the amendments to obtain a three-fourths vote at the next meeting. Therefore their introduction could only act as a firebrand. Discussion was wholly unnecessary, and he and those who thought with him would not take part in it.

The PRESIDENT moved to amend Dr. Elsberg's motion as follows: *Resolved*, That in the opinion of the Committee of the Whole it is advisable that the amendments to the constitution and by-laws proposed this evening be adopted as a whole, and that the chairman be so instructed to report. He also gave notice that he would subsequently move that, when the committee rose, it should report progress, and ask leave to sit again on the 18th of October.

[A motion to rise having been made and seconded, it was put and declared lost.]

The PRESIDENT again brought up his motion instructing the committee, and it was now seconded and declared carried. A division having been called for, the motion was found to have been carried by a vote of 103 to 34.

On motion of Dr. FLINT, Jr., the committee rose, reported progress, and asked leave to sit again October 18th.

On motion of Dr. H. G. PIFFARD, the committee's request was granted.

The PRESIDENT then took the chair.

Dr. FLINT, Jr., moved that the amendments lie over until the next meeting, under the rules. Carried.

The meeting then adjourned.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Meeting of September 12, 1883.

DIETETICS FOR THE SICK.—DR. CHARLES M. SELTZER read the following paper :

In presenting this paper, it is but justice to state that it has been prepared during the leisure of the past week as a substitute for one by another member, who was unable to keep his engagement. The subject has been selected more from the hope of eliciting some practical ideas, and a desire to emphasize its importance, than to announce anything new, or to exhibit the best paces of a hobby. Close attention to the methods of our most successful general practitioners convinced me that in dietetics was their stronghold. At the same time there was plainly to be seen a distressing lack of knowledge as to variety of foods and the preparation of them. In order to find out whether there was a practical remedy for these two great faults, I have gone over a thorough course of preparation of diet for the sick, under the instructions and guidance of Mrs. S. T. Rorer, in whom are combined the practical attributes of cook, chemist, physiologist, and nurse, and I can safely say that, if every member of this society were to do likewise, his *armamentarium*, success, and self-satisfaction in the practice of medicine would be increased many fold.

It would be almost an endless task to discuss the literature of this subject. Let us condense the opinions of physiologists, chemists, hygienists, and all others in authority, by stating that food is divided into nitrogenous or albuminous; hydro-carbons or starch, sugar, and fats; and mineral or the various salts of the alkalies. Of these, the nitrogenous and minerals are the building materials, and the hydro-carbons are the heat- and force-producers. Food may also be classified into liquid, semi-solid, and solid; and, as the sum total of digestion is a matter of absorption and assimilation, it follows that the more liquid or dissolvable food is, the more readily will it be absorbed; hence this is the form to be chosen when it is desirable to obtain nourishment at the least possible expense of organic action. There are also conditions in which bulk and solidity are necessary, and here we select the semi-solid or solid food, or even indigestible matter.

Nitrogenous food, in its natural combination with mineral matters, is mostly made absorbable by stomachic digestion; it rebuilds the tissues, and the waste and refuse are excreted by the kidneys and skin as urea and uric acid and its salts.

Hydro-carbons are digested in the mouth and small intestines, are burnt up by union with the respired oxygen, thus supplying heat and force to the body. The waste and refuse are excreted by the lungs and bowels.

About three ounces of nitrogenous and twenty ounces of carbonaceous food are necessary to sustain the life of an adult man in idleness. With these epitomized facts in mind, let us consider the importance and use of dietetics in the treatment of disease. The importance has been signalized by Bence Jones, who has said that the effect of diet is far beyond any known remedy. This fact has been so well known for the past century that volume after volume has been written on "Dietetics," "Diet Cures," etc. A few of these have become standard works of authority, because of their scientific and exhaustive treatment of the subject, while hundreds of others have had but an ephemeral existence. All have had to reiterate the same facts, because very few new ones have been learned, and, aside from the knowledge of artificially digested food, the student of a hundred years ago knew as well as the student of to-day about what diet was necessary for the sick. True, theirs was an empirical teaching; they knew nothing of the physiological actions

of diastase, pepsin, and pancreatin, but they were all the more practical for that. Our present scientific reasonings on digestion are but the formation of rules and theories for very old facts. The importance of the subject is made more manifest when we consider how much of the sickness that we are called upon to treat is the result of some error in eating or drinking, and, as "removal of the cause" is the first step toward the promotion of recovery, it is easy to perceive how essential it is to know what constitutes proper and improper diet. Life depends upon diet, and the restoration of health depends upon the same principles as its preservation. Disease is the result of the violation of the laws of health, hence the first step toward recovery is to re-establish those laws; and as the material for repair and support must come from diet, we, as thorough physicians, should have a complete *practical* knowledge of dietetics and a proper appreciation of their curative value. But almost a decade of experience among physicians compels me to acknowledge that this is not the case, and that the most lamentable deficiency is in the practical application of the subject. Nature's simple and easily understood remedies are either lost sight of or ignored in the blind endeavor to find a medical specific for every human ill, or to establish an ideal notion, theory, or pathy. For the treatment of chronic affections, some good points may occasionally be gained by even observing the *modus operandi* of quacks, homoeopaths, and proprietary medicines, for in connection with either a depurative or inoperative preparation such dietetic and hygienic directions are almost invariably insisted upon as would, in themselves, relieve temporarily, and perhaps permanently, some of the most obstinate cases.

The methods of dietetic treatment of diseases are as various as are the ills that flesh is heir to, but all of them contain some of the following principles as essential features. In acute diseases, *rest* is of primary importance; it is the fundamental principle of their medical and surgical treatment, and the same idea must be carried out in dietetics by remembering what part each organ serves in absorption, assimilation, and excretion, and by avoiding such food as would cause the performance of that function. Of course, this plan is only to be pursued while the disease is advancing, and as soon as recovery begins there must be a gradual return to a promiscuous diet; very little at first—just enough to slightly exercise the crippled organ, using as great care as we would in instituting passive motion in a limb that has been fractured. Nature enforces this principle by the loss of appetite that marks the onset of nearly all acute diseases. The dietetic rest of an organ does not necessarily imply a depletory diet, for, while it is non-active, other organs may be made to perform a compensatory amount of work, and thus sustain or even increase the patient's vitality—so great is the versatility of our organic functions. It is upon this idea that we must act when we obey the command of Graves to feed fevers. In chronic diseases—those in which the natural course is direct from bad to worse, until death or some interposing process puts an end to them—every organ must be made to do its utmost; the whole system must be awakened to the threatening destruction. Herein lies the broadest field of action for our subject. No time should be lost; food should be administered as frequently as assimilation and proper amount of organic rest will allow; the appetite should be kept active, by using liquid, semi-solid, and solid food, prepared in such a variety of ways as to allow no charge of monotony or disgust. Surprise is frequently a useful element. Instead of leaving the patient to vacillate over his or her likes and dislikes, the nurse should be privately instructed how and what to prepare for each time, and how to serve it in the most appetizing manner. A valuable aid, usually lost sight of, is condiment. Think but for a moment how a savory dish will sharpen our appetites while in health, and I

am sure you will perceive its stimulating influence upon a debilitated patient, to whom the flat and insipid preparations usually offered are loathsome, or even nauseating. This disgust might frequently be avoided, and the amount of prescribed medicine be lessened. Many of the bitter tonics and carminatives of our materia medica are the same as are used in cookery, and are none the less efficacious in a palatable dish than in the nauseous pill or draught. Therefore let the delicate aroma of herbs, celery, and bay-leaves pervade the soups; use India curry on starchy foods, and, when desirable, add *capsicum*, *Piper nigrum*, etc., to animal broths and substances. In so doing, if necessary, you can satisfy the qualms of your professional dignity by remembering that in catering to the palate you reflexly stimulate the organs of digestion.

Some articles of diet may be administered simply for their curative effect. A five-ounce cup of strong coffee contains about sixty-six grains of extract, or an equivalent of about two grains of *cafféine*—quite sufficient to relieve a neuralgia, or a headache and sick stomach after a dose of opium. Beef-tea, made red-hot with red pepper, is the very best treatment for delirium tremens. A patient to whom I once administered such a dose, made so strong that I would not have dared to taste it myself, afterward told me that it was the most refreshing and cooling drink he had ever taken. A London surgeon to the police told me that he had treated a hundred and fifty cases of delirium tremens with this remedy *alone*, and had not lost one. The use of *chloral* in these cases is criminal, and many a death certificate of "delirium tremens" ought to be "heart failure from chloral poisoning." Mucilaginous teas and drinks made from gelatin, isinglass, Irish moss, and flaxseed, are very soothing to any inflammation within the digestive tract. Green vegetables are necessary to cure as well as prevent scurvy.

An old practitioner, who had spent his early professional life in the country, told me that when he first commenced practicing he used all the ordinary remedies in typhoid fever without any satisfactory results, until the introduction of turpentine by the late Professor George B. Wood. In it he soon discovered a useful ally, not so much in the drug *per se*, but because convenience and time compelled him to use a thick flour gruel as a vehicle, and the patients were nourished sufficiently to live through the attack.

In the science and art of preparing sick diet there is a most lamentable lack of knowledge, especially among physicians. They know the preparations by name, but not by nature, and the only way to learn the latter is to don the apron and take a practical course from a practical and scientific cook. Such a course was inaugurated last winter in this city and in Boston, with a very satisfactory result. The prospect for this season in this city is that the course will be very well attended. It is the only way to learn. I could read you receipts by the score, but it would be as useless as reading off so many medical formulæ.

Dr. L. TURNBELL, in opening the discussion, said: In reference to these questions, my opinions are rather of the old-fashioned kind, and I believe in courses of instruction on cooking, which will be of much use to physicians. Dr. Benjamin Rush was accustomed in his lectures to remark that "a physician should spend six months in a kitchen before entering upon his practical career." He desired to heighten the importance of a knowledge of the effects of food, and also the correct way of preparing it. All these advantages could be combined with a course on pharmacy. Physicians should learn how to make beef-tea, extract, etc., and similar articles. The important preparations of mush, of Indian and oat-meal, for instance, are rarely properly made. They should be prepared over night, so as to be thoroughly gelatinized; if made in the morning just before being served, they will not be digestible. In cases of

very weak stomachs, many articles of diet may be peptonized with great benefit by using a small amount of a mixture of sodium carbonate and pancreatin, these being allowed to act for a short time at a temperature of about 80° Fahr. Fairchild, of New York, prepares powders containing these peptonized materials in convenient amount. Such peptonized foods are like the old-fashioned preparations made with rennet and warm milk, and will be well borne by delicate stomachs. An article that is often wrongly prepared is barley. It may be softened and extracted with water, or it may be torrifed so as to make a sort of malt extract. In the latter form it is very suitable as a substitute for the diastase-like principle of the saliva in cases where that secretion is deficient. It can easily be given mixed with other food, as in puddings, for instance.

This summer we have been very successful in relieving the irritability of the stomach and bowels of both children and adults, due to temporary indigestion, by substituting first barley-water alone, and after a time a wineglassful of barley-water, with half a tumbler of milk, or its equivalent of condensed milk.

Too little attention is given to the character of water. It is sometimes very bad, containing either injurious mineral or vegetable matter. The Boston water supply was much injured lately by certain sponge forms.

Butter is an article of food which is often impure, and, besides, objectionable substitutes for it are often sold. The mixtures of animal fats known under the names of oleomargarine and butterine should not be used in the preparation of food.

Beef-tea contains often but little nourishment, and in debilitated conditions, such as most cases of typhoid fever, beef essence made, not from the round of beef, but from the neck, in which blood is found, will be much more nourishing. A valuable form of beef-juice can be prepared by cutting up in pieces fresh beef, and placing it under a block of ice until, by the pressure, all the blood has been extracted. With the addition of a little salt, it has been found to be retained by the most delicate stomach, and is very useful in cases of great exhaustion.

Dr. ALBERT H. SMITH: The older we get the less disposed we are to rely on medicine and the more on diet. The remarks in the paper in reference to the importance of teaching physicians the art of cooking are deserving of full indorsement. On one point, however, I can not agree with the author of the paper. He seemed to advocate the use of highly stimulating food in acute diseases; in other words, the methods advocated by Dr. Thomas King Chambers in his fascinating work—a work, however, which has done great injury. Dr. Chambers's idea was that all disease was due to depression, and therefore the remedy was to stimulate the system. This is an attractive theory, but is not true. In cases of disease attended with high temperature, we only add fuel to the flame by the use of stimulating food.

Nature has admirable powers of taking care of herself, even under a starvation regimen. The use of a low form of diet, with refrigerants and depressants, may often be of the greatest benefit. I can look back on my early experience, and recall cases in which, after operative measures, patients have been treated on the theory that plenty of pabulum should be furnished to the system, but such patients have perished. A strong patient will in such cases do much better on a low diet. Adhesive inflammation will be secured more satisfactorily on the low diet system.

Dr. J. M. BARTON: I had under my charge during three years a patient who sustained life on about a pint of milk a day—never more than a quart a day. He was a physician who had his own views on questions of diet and therapeutics. Dr. A. H. Smith is right in his position as to the importance of low diet

after operations, but in typhoid fever we have a very different indication. In the first case, i. e., after operations, food frequently acts as an irritant, but in the low fevers the patient is exhausted and needs support.

Dr. FORBES: I am reminded of a compliment which I heard the younger Larrey pay to Orfila, the great French chemist. He said that he (Orfila) was the greatest cook that ever lived. He said Orfila understood the disintegrating power of hot water. The effect of thorough boiling is most important, and since the days of Washington it has been an article of war that beans should be boiled for six hours. In the Crimea marked difference was seen between the French and English troops on account of the superior attainments of the French officers and surgeons in reference to many of the details of a soldier's life, and especially in cooking.

Dr. SELTZER, in closing the discussion, said: I did not wish to include in the paper a discussion of the methods of preparing food, but merely to express the idea that it is important that doctors should know what to cook and how to cook. Many articles of food, that as ordinarily prepared are unfit for the sick, can be cooked so as to be palatable and digestible. Mrs. Rorer's method of cooking liver is an instance of this. She exhausts it with water to remove blood, then places it on ice until required, when it is cut into thin slices and toasted; sweetbreads are somewhat similarly prepared.

As to the use of stimulating food, we must judge Dr. Chambers's views by his own method. He draws the line between acute and chronic diseases, not making time the basis of the classification, but the tendency of the disease. Acute diseases tend to recovery, and these he leaves undisturbed; chronic diseases tend to fatal results, and in these he uses a highly nutritious diet, stimulating when a depressed state exists.

In reference to the suggestions made by different speakers as to the importance of systematic instruction of physicians in the art of cookery, I may say that such courses are now being organized. I do not think that such instruction can be advantageously given with pharmaceutical teaching. A woman's taste and tact are essential to the art.

A CASE OF AMPUTATION OF THE BREAST, WITH REMARKS.—Dr. HENRY LEAMAN read the following paper:

Mrs. J. J. W., aged forty-eight, married twenty-nine years, is the mother of eight children still living, and has been the recipient of ten severe miscarriages. She presented herself at my office on the 1st of September, 1882, complaining of a tumor in her breast, which she had noticed for the first time three months previous. At that time a small pimple upon the surface of the skin served to call her attention to the swelling that lay beneath in the substance of her breast. Examination showed a tender enlargement, the size of an English walnut, situated deeply in the inner lower quarter of the left breast. She stated that during the past week she had experienced for the first time frequent, sharp, retracting pains shooting through the nipple. Menstruation had ceased with her six years previous, without giving rise to any trouble. She now had no cachexia, and was apparently in her usual health.

On the eighteenth of the same month she called again; the growth had not perceptibly increased, but she spoke of having pain in her breast bone. Amputation of the breast was recommended. The effect of this advice was to send her upon a blind pilgrimage through the desert of therapeutics. Now electricity, now pow-wowing, now homœopathy—each in its turn was tried with results equally gratifying to the patient.

The *ignis fatuus* which I had lighted brought her again to me on the 23d of April, 1883. The tumor then was of an oval shape, and about four inches in length. From its inner anterior surface were extending two cornua, slightly ulcerated, about

three fourths of an inch in length. The skin over the tumor was deeply congested, red, and inflamed, as was also the skin for several inches around. The tumor in front rested upon the cartilages of the rib, but was movable. The glands in the axilla were slightly involved. With the assistance of Drs. Hatfield, Brubaker, Weleh, and R. Leaman, the breast was removed under the spray, on April 26, 1883, and Lister's dressing applied.

One nodule of hardness was removed from the axilla. At the sternal end the cut surfaces could not be approximated within two inches, owing to the necessary ablation of tissue.

April 27th.—Patient doing well. Temperature $99\frac{1}{2}^{\circ}$, pulse 112 at 10 A. M.

April 28th.—Temperature 99° , pulse 104 at 10 A. M.

The breast was dressed under the spray at 10 P. M. Temperature 99° , pulse 104.

April 29th.—Temperature $98\frac{1}{2}^{\circ}$, pulse 96 at 10 A. M.

April 30th.—Temperature $99\frac{1}{2}^{\circ}$, pulse 96 at 10 A. M.

May 1st.—Temperature $98\frac{1}{2}^{\circ}$, pulse 92.

May 2d.—Temperature 97° , pulse 84; dressed the wound the second time under the spray; the drainage-tube was removed, as were also some of the sutures.

May 3d.—Temperature 97° , pulse 80 at 4 P. M.

May 4th.—Temperature 97° , pulse 100. Dressed again under spray.

May 6th.—Dressed under spray; removed the sutures and two ligatures. Temperature 98° , pulse 104.

May 7th.—Temperature 98° , pulse 104. Patient sitting up.

May 8th.—The posterior three fourths of the incision entirely healed and healthy. The anterior one fourth was perfectly healthy and granulating rapidly. All sutures and the remaining ligatures were removed.

On and after May 10th the wound was dressed with iodoform, cosmoline, and salicylated cotton, under which treatment the wound rapidly healed. Dr. Brubaker made a histological study of the growth, and pronounced it carcinoma.

As soon as the cicatrix was complete, neuralgic pains began to be felt in the left arm, right leg, and body. At first the cicatrix remained perfectly healthy in appearance. Subsequently, however, a nodule appeared in the lower part of the neck, behind the left sterno-clavicular articulation. Next, the left axilla, the posterior and healthy part of the cicatrix, both began to show hardening. At present there is a chain of nodules along the whole cicatrix—one, large and painful, is felt over the cartilage of the third rib on the left side. The left axilla is but one hard pyramid. The left hand and arm are swollen. A pain of a lancinating, burning character is referred to the left scapula, arm, and axilla, occasionally shooting in the course of the incision.

The apparent freedom from involvement of the axillary glands at the time of the operation, and the rapid development of the disease after the healing of the cicatrix, would seem to point to the idea that the original tumor was but a local nidus for a constitutional trouble, and that, this having been destroyed, a general efflorescence of the disease ensued. A kindred idea is found in the popular belief that a manifestation of phthisis may follow the operation for the cure of anal fistula. The observations on the change of life in women would seem also to bear upon the same point.

Dr. Brubaker's Analysis of the Tumor.—“Upon section, the tumor is firm and hard, and presents a white, glistening surface, from which can be scraped a small quantity of fluid matter. Under the microscope the connective tissue stroma is seen to be abundantly developed; in its meshes are developed epithelial cells, some of which have undergone degeneration. In some situations the cells are arranged in a linear manner, while in others they form groups or nests.”

Dr. BALDWIN: I remember that the late Dr. Atlee spoke of the effects of arsenic in carcinoma, and gave a number of cases in which he used it with the apparent effect of preventing the return of the tumor. I employed it in a case on which operation was performed in 1875, the patient being put on the use of Fowler's solution, continued until 1876, when the growth re-developed, and a second operation was done in 1878; no return has occurred to this time. The use of arsenic was discontinued after the second operation. During the formation of the second growth some trouble occurred in the lung, and cancer of that organ was feared, but it disappeared after operation.

Dr. FORBES: Dr. Leaman speaks of a period of efflorescence after operation, by which I understand a general development in different organs; this, as he remarks, does not always occur after the first operation. In 1864 I removed a cancer from the breast of a lady. In 1867 a hardened growth appeared in the cicatrix. It was not removed at once, as it was then giving no pain. In a short time, pain having developed, it was removed. It returned a number of times, and was each time removed until it developed in attachment to the interosseous cartilage and the muscles, and then I declined to remove it, although the patient very much urged me to do so. It continued to increase, and in eighteen months it involved the integument on the clavicle and sternum. Its condition was much aggravated by various caustic applications. Finally some irregular parties attempted to remove parts of the diseased mass, and this was followed by an efflorescence, and a number of organs in the thorax and abdomen became involved. The patient died eighteen months after the last attempted operation.

I have heard Dr. George W. Norris speak of this condition of efflorescence and its likelihood to occur in patients upon whom the cauterizing and escharotic treatment had been practiced. After such treatment he advised non-interference with the knife.

Dr. J. M. BARTON: I have been interested in examining the advertisements and circulars of the empirics who claim to cure cancer without operating, and I find them reporting cures of cases of over forty years' duration. Now, as scirrhus, if left untreated, does not last usually more than four years, it must be that these long cases are benign tumors.

Even when the knife does not cure, it may prolong life—make it more tolerable. Operation offers us ten per cent. of recoveries. Dr. Leaman's case may be regarded as typical. The almost immediate return in the axilla is suggestive of the possibility that some affected gland had escaped removal. The removal of the entire breast in the earlier stages gives chance of total recovery, and in the later stages, with ulceration, operation is also useful; but in the intermediate periods, when the tumor is extensive and adherent to the adjacent structures, non-interference is best.

Dr. ALBERT H. SMITH: I am glad to hear Dr. Barton advocate the repeated use of the knife; I believe in attacking the tumor every time it appears, for, at the least, life may be prolonged and made comfortable, and the patient may be spared the suffering and loathsome discharges of the advanced stages of the disease, conditions which make her a source of misery to herself and to those around her. Cancer is doubtless a local disease, although a constitutional taint or tendency is probably inherited. Yet, if the tumor be removed early, a cure can be obtained. Dr. Leaman's patient did not do well, because she did not follow the advice he gave at first. Removal of the breast should be complete; every reappearance should be met by operation. I recall the case of a patient from whom, at the first operation, no axillary glands were removed, but at the second twelve were taken out. Two more operations were subsequently performed; at the last one a very large amount of tissue was removed, but

perfect union was obtained. Operation should cease when the condition is such that union by first intention can not be obtained. In this particular I can not agree with Dr. Gross, who pays no attention to the size of the cicatrix, or the question of union by first intention. The patient just referred to has been well during this summer, but is now beginning to manifest infiltration, and the condition is such that primary union can not be obtained, and I do not consider operation permissible. Under the modern advances in antiseptic surgery, operative interference in cases of cancer becomes simple and entails little suffering, and the after-treatment is not difficult.

Dr. BARTON: The important point in operation is to make a complete cleaning out of the affected glands, and the obtaining of this must not be interfered with by consideration of the amount of tissue to be removed, or by the desire for primary union. Where much tissue is removed, the after-treatment is more simple than where flaps are made; no counter-openings are needed; no drainage-tubes; no pockets of pus are formed; but little, if any, fever occurs; the wound usually goes on uninterruptedly to full cicatrization. In hospital practice I rarely have to see a case after operation from which the breast has been thus removed. I can not recall a case in which the disease returned in the cicatrix so formed, though it often returns in the axilla. I remember a case in which three operations were performed upon secondary axillary growths in a period of four years—the last operation being amputation of the arm, ligation of the axillary artery, and removal of the growth—yet the resulting cicatrix from the first thorough breast operation remained perfectly soft and healthy.

Dr. LEAMAN: The case I have reported is an ordinary one, and the operation was certainly performed with ordinary care. The axilla was opened, and all present agreed that no glands were affected except the one removed. The first symptoms of return were shooting pains in the fingers, referable to a nodule near the insertion of the sterno-cleido-mastoid muscle, behind the left sterno-clavicular articulation. Subsequently the axillary glands were involved. A few small nodules have since appeared over the seat of the first tumor. I think it important to remember that surgeons may make mistakes; that some of the cases diagnosed as cancer, and apparently cured by operation, may be benign tumors. In my experience, arsenic has not been of use in carcinoma.

REMARKS ON THE CHICAGO BEEF WIRE SKEWER.—Dr. W. R. D. BLACKWOOD read the following: The supply of good, wholesome meat to a large city is a problem involving many points of great importance. Many cattle are slaughtered within a few hours after reaching the abattoirs, before the feverishness and excitement resulting from a long railroad journey have abated, and the meat under the circumstances is not nearly so good or suitable for food as it would be, even in healthy and prime animals, were it killed after a due time of rest. For a short time past, beef slaughtered in Chicago and brought here in refrigerator cars has attracted the attention of those able to judge the article according to its merits, and for quality it is pronounced fully equal to any heretofore put on the market, and far ahead of the great bulk previously sold in the city, so far as a wholesome, sound, and moderate-priced beef is concerned. The animals are selected from approved droves, and well fed, watered, and housed for a definite and proper time before killing, and the product, therefore, is not only in its appearance perfect, but, in the vital point of fitness for wholesome, nutritious, and palatable food, it is unrivaled.

Some weeks ago a sensational attack was made on this variety of beef, in the interest of a clique of butchers in this city, who, knowing the value of the Chicago article, were afraid of the effect on their business when it became better known to

the public, and the silliest pretext, among others, advanced, was a supposed danger to consumers from the novel skewers employed to fasten the labels on the hind- and fore-quarters, these being of barbed wire, such as I exhibit to you to-night. It was predicted that an epidemic of harpooned tongues, tonsils, and pharynxes would ensue from swallowing unawares by consumers the numerous wire skewers concealed in the meat, and I am informed that for a time a serious falling off in the sales actually resulted from fear on this point. You will readily see that any one who should try to gulp down a morsel of meat large enough to hide this fastener must at the same time be in a famishing condition, have the appetite of a tiger, and need lessons in table etiquette, to put it mildly.

The labels which are attached—one to each quarter only—are removed by the butcher before cutting up the meat, and could not, even if allowed to remain, fail to attract the attention of both cook and eater. Mr. Bradley, of the Great Western Market, is the largest dealer in this excellent beef in this city, and he has kindly supplied me with samples of the barbs. The claims which he makes for the particular beef under consideration are worthy of notice, as his experience in business for some years past is unequalled in this city, and the enormous quantity which he distributes to a large section of surrounding country fully justifies the high value he places upon it. I am glad to confirm what he says, from personal experience in my family. The meat is simply delicious, and excels anything we have previously had from the best butchers of the city.

A NEW USE FOR AN OLD INSTRUMENT.—Dr. LEAMAN called attention to the fact that he had found the hooked end of Dr. Gross's ear and nose instrument the best and safest means of rupturing the membranes in labor.

Meeting of September 19, 1883.

ANEURYSM OF THE ASCENDING POSTERIOR PART OF THE AORTA.—Dr. CHARLES M. SELTZER said: I am indebted to Dr. W. Duffield Robinson, Resident Physician of the Eastern State Penitentiary, for the pleasure of being allowed to exhibit this specimen. It is of especial interest to me because I saw the case several times during life.

L., aged thirty-five years, height five feet seven inches, usual weight one hundred and forty-two pounds, was admitted to the Eastern State Penitentiary, under a two years' sentence for larceny, in September, 1882, previous to which time he had been four months in a county jail. Sixteen years of his life were spent in various prisons under different sentences. No family history could be obtained.

His medical history dates back sixteen months ago, when he complained of pain between the shoulders, but he continued in comparatively good health until six months ago, when he began to complain of diffuse intercostal pains in both sides and pain in the epigastrium; also poor appetite, nausea, and indigestion; anæmia, and general debility. Upon careful examination, no organic disease was discovered. The heart was rather weak, but otherwise normal. Thoracic percussion was normal, except slight increased dullness under upper part of the sternum. Pulse feeble, but otherwise normal. There was no syphilitic history, no œdema, no palpitation of the heart or præcordial pains, and no interscapular pain during the past year. No bulging of the chest-walls, either anteriorly or posteriorly. No discoverable aneurysmal bruit. In fact, there was nothing to indicate any organic disease. The case was examined by six reputable physicians, and all of them arrived at the same negative conclusion. The patient's physical condition steadily grew worse, and he was given the liberty of a large yard, excused from work, and allowed a plentiful nutritious diet, general tonics, and anodynes for the neuralgias. Under this treatment he seemed to improve, but the neuralgias and insomnia continued.

Three weeks ago (August 28, 1883), while sitting in the yard, he suddenly grew very pale, complained of faintness, and was caught while in the act of falling to the ground. He was carried to the hospital de-

partment and given stimulants. The physician arrived in a few minutes and found him dying.

A post-mortem examination was made a few hours later by Dr. Robinson, assisted by Drs. Rudderow, Taylor, Weideman, and Seltzer. A large tumor, found just above the heart, proved to be an aneurysm of the posterior ascending portion of the aorta. The sac contained one and a half pints of freshly clotted blood, unorganized, and its posterior wall was formed from three dorsal vertebræ, the bodies of which were very much eroded. There was also some erosion of the corresponding ribs, and a slight bulging of the sac between them. The heart was very small, but free from disease. No other organic trouble observed.

A careful review of the case suggests the following thoughts to me: 1. That the disease was one of long standing, and that, on account of the enforced quiet life of the subject, no inconvenience was experienced until erosion of the vertebræ was so extensive as to cause neuralgias of the adjacent nerves, and slight interscapular pain of but short duration. 2. That the case was rendered still more obscure by the facts that the opening into the sac was large, and that considerable portion of the sac-wall was made up of bone—both of which tend to destroy the possibility of there being a diagnostic aneurysmal bruit. 3. That if there had been much interscapular pain, due to the erosion of the vertebræ, and it had been treated by introducing a seaton or issue in its vicinity, as has been lately recommended by standard authority (Thomas Hayden, Quain's "Med. Diet."), there would have been considerable danger of puncturing that portion of the sac protruding between the ribs. 4. That there can be a very large thoracic aortic aneurysm without any bulging of the chest-walls, and that it may erode much of the bodies of the vertebræ without causing spinal curvature. 5. That, as there was no hæmorrhage into the thoracic cavity or canal of the spinal cord, death must have been due to pressure on some of the cardiac nerves or ganglia, and consequently collapse from heart-failure.

FEMORAL HERNIA IN AN AGED PATIENT; STRANGULATION; OPERATION WITH CURE.—Dr. W. R. D. BLACKWOOD read the following history:

Mr. B., aged seventy-three, tall, thin, but bearing his years well, and with a previous history of good health, was taken ill with supposed cholera morbus on Saturday, August 11, 1883, but, from the suppression of alvine dejections shortly after the seizure, and the rapid change of the vomited matter to a manifest stercoraceous fluid by the time his family physician—Dr. John Ivison—saw him, the diagnosis of the family was set aside for one of more grave nature. The gastric distress was very great, the desire to vomit urgent, and the act occurred at short intervals. Previously to his illness the gentleman had been extremely constipated, and the amount of liquid and semi-solid fecal matter rejected per os was simply inconceivable except to those who saw it. At each instance of vomiting a fair-sized wash-basin was half filled, and the total quantity thrown up before relief ensued was, to speak within bounds, fully three gallons, showing the enormous distension of the intestine which may occur in chronic constipation.

The case was believed to be one of obstruction, with possible invagination of the bowel, and efforts were made toward overcoming the difficulty and obtaining an operation in a normal direction, but without success. The question of strangulation by hernia was not at first accepted, because, although there existed an evident swelling at Poupart's ligament, the size of it was so small as to be taken for an enlarged gland, the patient having had glandular enlargement previously. There was no local pain, no tenderness, no tension, no dragging sensation at the site of the swelling, no tympanites—in short, the usual local signs of strangulated hernia were absent. The little tumor also was movable to such an extent as to easily deceive one, even when closely examined. The doctor having asked my opinion as to the condition of the patient, we saw him together, and I coincided with him as to the difficulty in stating positively to the family the evidence of hernial strangulation, but, as the patient was rapidly sinking from exhaustion, we decided to

make an exploratory incision and determine the nature of the enlargement, the justice of this being explained.

The patient was etherized, and, after cutting down to the sac, the mass was found to be an entero-epiplocele. The sac contained very little serum, and, considering the fact that strangulation had doubtless existed for at least thirty-six hours, the bowel, though highly congested, was in good condition. The gut was tightly nipped at the crural ring and was nearly empty, which accounted for the small size of the tumor. The hernia was internal to the femoral vessels, but closely adherent to them. It was reduced with some difficulty and pushed far up to clear the deep thrust of the needle in closing the wound. The stitches, four in number, were deeply taken, and the ring obliterated as nearly as possible. A compress of lint, wet with a mixture of Canada turpentine, oil of sweet almonds, carbolic acid, and glycerin (an excellent dressing), was applied under a spica bandage of the groin, and the patient made comfortable in bed. He reacted well from the operation, vomited freely once thereafter, and in an hour and a half passed an alvine dejection without pain or difficulty. The appetite returned moderately at once, food was well retained, and his strength returned nicely. For forty-eight hours the wound did well, healing for one half its length by first intention, but then inflammatory action set in and free suppuration ensued. In a week, however, the wound had closed, and the old gentleman was able to walk his room with comfort.

The diagnosis of femoral hernia is, at times, not easy, being, as here, liable to be confounded with enlarged glands, or localized varix of the saphena. There was no impulse on coughing, no effort at reduction affected it, and, excepting only the very small tumor, all the local signs of strangulated gut were absent. The advanced age of the patient was against him, and his depressed vital power was a bad factor. The result shows the value of exploratory operation under the circumstances, and I believe that the attendant is unfaithful to his patient if he does not insist upon it in every suspicious case. The wound is of little account; it does not enhance the danger which is already imminent, and it may, as here, save a valuable life.

SCIRRHUS OF THE MAMMARY GLAND.—Dr. W. R. D. BLACKWOOD also read the following: The tumor which I exhibit to you this evening was removed from a lady this morning. The growth has only been noticed by herself for about seven months, but it has undoubtedly existed for a longer period. It is an *atrophying scirrhus* of the right mammary gland, is densely hard, and was all that remained of the breast, which was thoroughly extirpated, together with the underlying fascia, all discoverable lymphatics, and a portion of the pectoralis major muscle. The character of the growth renders her chances for complete recovery doubtful, as such varieties of cancer are recurrent in a high degree.

She reacted well from the operation, but had a moderate secondary hæmorrhage four hours after I left her, which was controlled by pressure. I learned this evening that she had a decidedly hæmorrhagic diathesis, which renders my peace of mind unpleasant just now, for as it never rains but it pours, I am worried by two easels three miles apart, which tend to keep me in hot water, which, though efficient as a hæmostatic, is undesirable as a factor in personal comfort.

VERMIFORM MUCOUS DISCHARGE FROM THE RECTUM.—Dr. BENJAMIN LEE spoke as follows:

The interest of this specimen lies in the close resemblance it bears to a tape-worm. This is by no means so striking as it was when I received it a week ago. It was sent to me, in fact, by the mother of the patient, a young lady residing in a neighboring city, under the impression that it was a portion of a tape-worm, partly dissolved by medicine. The history is briefly this: The patient had been under my care, some years since, for a uterine displacement with hæmorrhoids. The latter had pretty much disappeared, but had been succeeded by hæmorrhages from

the bowels—not large in quantity or very frequent. About four weeks since, she noticed that she was passing segments of a tape-worm. Another member of the family having been recently infested in the same way, and having been successfully treated by the use of pumpkin-seed in milk, according to an old formula of Paul Beck Goddard's, which was among the family treasures, she determined to treat herself on the same plan. Accordingly, after a fast of thirty-six hours, she took half a tumblerful of pounded kernels of pumpkin-seed, stirred into the same quantity of milk, and, two hours after, three tablespoonfuls of castor-oil. This brought away only segments of the intruder, alive and active. After an interval of thirty-six hours, during which she took but one meal, she repeated the two doses, with the same effect, except that toward the end of the purgation the segments appeared dead. The purgation, however, was soon followed by profuse and protracted hæmorrhage from the bowels, which, in addition to the action of the medicine and the long abstinence from food, left her very much exhausted. The following week she visited me at my office. Examination with the finger showed retroversion and partial prolapse of the uterus, the shrunken remains of external piles, no internal piles or tumors of any kind, a thickening of the posterior wall of the rectum, and a velvety or fibrillous feel to the mucous membrane overlying this thickened portion. As frequent hæmorrhages had occurred since that which followed the use of the tænicide, I strongly advised against any further immediate attempt on the parasite. I instructed her to take an injection of ten grains of sulphate of zinc in an ounce of flaxseed-tea at bedtime every night, to be retained, and an injection of a pint of flaxseed-tea the following morning to produce an easy evacuation.

A week later she sent me down this specimen, saying that she had passed several more like it, and wishing to know if it was not the worm partially dissolved. She again visited my office on the fifteenth of this month. There had then been no hæmorrhage for five days, and whereas at first it was with the greatest difficulty she could retain the injections for an hour, she was now able to retain them all night with comparative comfort. The discharges of mucus, on one day amounting to five or six, did not now occur as often as daily. They are preceded by a sense of weight and tenesmus, much as the hæmorrhages were, which is relieved after they have taken place. I omitted to say that I had also prescribed fifteen drops of fluid extract of ergot four times daily. I now ordered a continuance of the injections, and a diminution of the ergot to ten drops. Upon examination, the rectal mucous membrane felt decidedly more natural. I yesterday received a note from her saying that she had passed fifteen inches of the worm very close to the head, but could not make sure that the latter had come away. Should this prove not to be the case, I shall, when the mucous membrane of the rectum has become sufficiently repaired, administer pelletiérine, having used it successfully quite recently. The patient, a gentleman living also out of town, writes me that the most notable effect of the medicine, apart from its dislodgment of the intruder, was "extreme dizziness, and a feeling of the eyes as if starting from the sockets, accompanied by uncertainty of vision." "The feeling of nausea," he adds, "was, however, by no means of the distressing nature that I told you accompanied a previous attempt upon the worm." The attempt he refers to was made, I think, in Germany, and the remedy used was the pomegranate; and so intense was his suffering from deathly nausea that he has been content to play host to his not very troublesome guest now for some years, rather than undergo a similar experience of wretchedness, being only driven to it finally by his approaching nuptials.

Miscellany.

THERAPEUTICAL NOTES. *Rhus Toxicodendron* as a Remedy for Rheumatic Inflammation of the Sheaths of Nerves and Tendons.—Thomas Gifford, M. D., of Laurel, Indiana ("Cincinnati Lancet and Clinic," August 25, 1883), recommends *Rhus toxicodendron* as a curative agent of the "greatest certainty" in some forms of chronic rheumatic affections of fibrous tissues. For instance, what is commonly termed "sciatica" may be a pure neuralgia of the sciatic nerve, or it may be a rheumatic inflammation of the sheath of that nerve." In the neuralgic form, *rhus toxicodendron* is not the remedy"; but in the rheumatic form it is of marked efficacy, if used according to certain directions. The powdered leaves, the infusion, and the extract are nearly inert, and therefore the drug has fallen into disrepute. Dr. Gifford pursues the following plan: During the last week of May or the first week of June he gathers the leaves of the *Rhus toxicodendron* (the *Rhus radicans* will not answer). If practicable, leaves grown in a shady place are selected, and they are gathered after sunset on a damp, sultry day. They are cut fine and macerated two weeks, in a colored bottle, with deodorized alcohol, 95 per cent., in the proportion of one part of the leaves to two parts of the alcohol. The filtered liquid, which should be kept in well-corked colored-glass bottles, contains concentrated *toxicodendric acid*, in which the medical properties of the plant reside. This is to be diluted with pure deodorized alcohol on the decimal scale. Two drops of the third dilution, taken night and morning, will act beneficially within forty-eight hours on the rheumatic form of the disease. When the pains have abated somewhat, one dose at evening is to be taken until the cure is complete. "This may look like small dosing," he says, "but I have found one case in which it was too large, and none where it was too small." In the case referred to, marked *rhus* poisoning occurred on the third day. After more than twenty years' experience with *Rhus toxicodendron*, Dr. Gifford has come to the conclusion that it exerts a decidedly curative action on diseases of the fascial sheaths of nerves and tendons. *Rhus* poisoning may be promptly and certainly controlled by freely applying *Lobelia inflata* externally (two parts of the fluid extract to one of pure glycerin), and by small doses of aconite and belladonna, internally, given alternately every two hours until the itching and burning abate.

THE SANITARY CONDITION OF THE MISSISSIPPI VALLEY.—Dr. John H. Rauch, as executive officer of the Sanitary Council of the Mississippi Valley, in a recent monthly report, says that during the month of August the supervision of the river and rail inspection service, by the executive committee of the sanitary council, was confined to New Orleans, Vicksburg (at Fort Adams), and Memphis (at President's Island). At New Orleans sixty-five steamboats and other river craft, with an aggregate capacity of 71,817 tons, and carrying 2,684 officers, crew, and passengers, were inspected and duly provided with the certificates of the sanitary council. On the Illinois Central and Louisville & Nashville railroads, at the same point, there were inspected 139 freight trains, comprising 1,911 loaded, 1,523 empty cars, together with their crews of 834 persons. At the inspection stations at Fort Adams, below Vicksburg, and on President's Island, below Memphis, an aggregate of 228 river craft, with a capacity of 224,410 tons, and carrying 15,025 persons, were inspected. These boats were found in good sanitary condition, and no suspicious illness appeared among those on board, although there were a number of cases of the malarial fever of different forms, mainly intermittent. An aggregate of 770 ocean vessels, river craft, and freight trains, with a capacity of 893,231 tons, and carrying 27,888 officers, crews, and passengers, have been inspected under the supervision of the council since July 1, 1883.

With the exception of one suspicious case in the early part of the month in Jackson County, Miss., on Fort Bayou, near the coast, there has been a very unusual absence of anything like yellow fever in the area in which the inspection service is maintained. In the case alluded to, the Mississippi State Board of Health acted upon the hypothesis that the disease was yellow fever, although the diagnosis was doubted and the weight of opinion against that conclusion. An inspector was at once put on duty in the district, and the locality was placed under a

quarantine of isolation for fifteen days; disinfection was resorted to, and nothing further of a suspicious nature has since developed.

Dr. Rauch adds that New Orleans has not been so free from alarm, or cause for alarm, during the corresponding months of many years as during the sixty days referred to.

THE UNIVERSITY OF NEBRASKA.—We learn from the eleventh annual catalogue that the faculty of the College of Medicine consists of the following professors: A. R. Mitchell, M. D. (Dean), anatomy; Paul Grossmann, M. D., surgery; L. A. Merriam, M. D., practice of medicine; H. B. Lowry, M. D., physiology, materia medica, and therapeutics; W. M. Knapp, M. D., obstetrics and diseases of women and children; H. H. Nicholson, chemistry; L. B. Graddy, M. D., diseases of the eye and ear; the Hon. O. P. Mason, medical jurisprudence; and N. J. Beachley, M. D., demonstrator of anatomy. The university being endowed, all persons, whether men or women, who are found qualified to pursue the study of medicine are admitted without charge, except a matriculation fee of \$5. The course embraces three years of six months each. The study of practical anatomy and practical chemistry is among the requirements for graduation. In lieu of a thesis, a clinical report is required.

THE THEORY OF FILTH AS A CAUSE OF DIARRHŒA.—Dr. Edward Ballard, a medical inspector under the English Local Government Board, made use of the following language in his remarks at the recent meeting of the British Medical Association ("British Medical Journal," Aug. 25, 1883): "Another common theory is that diarrhœa is due to filth, and especially excremental filth. I do not say that excremental filth has nothing to do with it; but in the town of Nottingham there is less excremental filth- nuisance than perhaps in any town in England; there is the most careful removal, twice a week, of excrement, which is received into pails and covered over with ashes. I have been all over Nottingham, and have never smelt anything like an excremental odor in the town; and yet Nottingham is one of the towns with a high death-rate from diarrhœa. I have a difficulty in accepting this kind of filth as a leading cause; and I may say the same of surface-filth. I suppose there is scarcely a town in England in which there is less care taken about pollution of surface than in a certain town in Cornwall—Helston. I do not know any town more filthy in regard to surface at the rear of dwellings; and yet in Helston summer diarrhœa is not prevalent, and there are very few fatal cases. If filth would do it, one ought to have it excessively in certain parts of Plymouth; yet certainly it does not occur there in the same degree as in other towns. I may mention other things as not being the leading cause of summer diarrhœa. That they may have more or less to do with it, or with its fatality, I do not deny; but there is something underlying the whole of these, and what that something is it is my business to find out."

VACCINATION AND INSANITY.—In an interesting and suggestive article on Variola and Insanity, by Dr. James G. Kiernan, of Chicago ("American Journal of Neurology and Psychiatry," August, 1883), he relates certain experiments undertaken by himself and Dr. M. J. Madigan to ascertain the effects of vaccination on the insane. The experimenters were not aware at the time of Calastri's suggestion of such an inquiry to elucidate the reciprocal action of small-pox and insanity. Dr. Kiernan says:

"Progressive paretics, atonic, simple, and agitated lypemaniacs, primary monomaniacs with depressing delusions, terminal dementes, and hebephreniacs were vaccinated. The phenomena therefrom resulting might be divided into four great classes: First, those in which the vaccination exerted a beneficial effect upon the pre-existing insanity; second, those in which it unfavorably influenced this; third, those in which dangerous complications resulted; and, finally, those exceptional cases in which dermic phenomena were present. The psychoses on which vaccination exerted the most marked favorable influence were lypemania attonita and agitata, progressive paresis, rarely in acute lypemania, primary monomania, and chronic confusional insanity. In all cases wherein such influence was exerted, the vaccination was followed by a high fever and marked general constitutional disturbance. Delusions of infection with syphilis, of loss of identity, of paralysis, of poisoning, and in several cases of infection with small-pox, were frequently

found after the vaccination. One case of a new delusion has already been mentioned. In progressive paretics certain trophic changes made their appearance. The toe-nails in four cases dropped off. In one case othematoma made its appearance during the vaccinal fever. In a syphilitic progressive paretic the luetic affection seemed to take on a malignant type. Three atonic lypemaniacs who had markedly deficient capillary circulation suffered from gangrene of the toes and fingers in consequence of vaccination. There were formed on a few progressive paretics large bullæ, which subsequently gave way to ulcers of a very indolent type. In two progressive paretics apoplectic attacks came on during the vaccinal fever. In ten progressive paretics large abscesses made their appearance after the vaccinal fever had subsided, on the seat of the pre-existing vaccinal eruption. The hair of one progressive paretic became gray on one side of the head, while the eruption from vaccinia remained confined to the opposite side of the body. Two atonic lypemaniacs who were suffering from phthisis seemed to be disastrously influenced as regards the pulmonary affection which had been previously running its course without marked febrile disturbance, but thereafter had marked rises in temperature. One lypemaniac became temporarily glycosuric. There was a pretty general eruption resembling variola. On the fever subsiding (in at least ten cases it reached 102° F.), the patient, if a lypemaniac, was found to be much more cheerful, and occasionally delusions of persecution seemed to be temporarily in abeyance. One patient permanently recovered, and, as he had exhibited no change previous to the vaccination, it is probable that this exerted a marked influence. The progressive paretics were attacked by boils soon after recovering from the vaccination, and were for a short time rational, but the physical symptoms of the disease remained unchanged. The agitated lypemaniacs were quiet and cheerful during the constitutional disturbance from the vaccination, but, after it had passed away, all but two returned to their usual condition. These improved from that time, and finally recovered. Three primary monomaniacs were markedly quiet and relatively rational during the vaccinal fever. Four cases [sic] of chronic confusional insanity talked coherently and relevantly during the vaccinal fever, but resumed their usual condition on recovery."

DEATH FROM AN ATTEMPT TO REDUCE AN OLD DISLOCATION OF THE SHOULDER.—The "New Zealand Herald" reports the occurrence of an accident in Castlemaine, Victoria, on March 12th last, to a Mr. Taylor, who fractured his arm and at the same time sustained a dislocation of the shoulder on the same side. The fracture was treated by splints, and the injury was so far recovered from that the patient was able to attend to his business, and complained only of stiffness at the shoulder. On May 13th an attempt at reduction of the dislocation by pulley extension at the wrist and counter-extension in the axilla was made, the patient being under the influence of chloroform. After extension had been made for some time the tissues in the axilla gave way; the wound thus made was sewed up; hæmorrhage then occurred, which was controlled by pressure, but next day the limb was found to be gangrenous and was amputated; death occurred within twenty-four hours. A coroner's inquest was held on the case, and a verdict of "death from misadventure, no blame being attached to the doctors," was returned. The account from which we have quoted does not give us full information about the case, and without further facts it would be impossible to express any opinion as to the line of practice here adopted. As a rule, in cases of fracture complicated with dislocation, it is best to set the fracture very firmly in splints, and then at once attempt reduction of the dislocation under chloroform. In attempting to reduce old dislocations it is important to remember that the chief reliance must never be placed upon extension. The first obstacle to be overcome in such cases is the adhesions which the displaced bone has formed to neighboring structures; and these adhesions can only be safely, and also most easily, broken down by rotation and similar manipulations. When this difficulty has been got over, that of the locking of the bones is met with; and, while extension may overcome this, manipulation is usually easier, and it is always safer. The aim of extension is to overcome muscular spasm; and now that we can accomplish this by means of anæsthesia, and in some cases by well-conducted manipulation, its rôle in this department of surgery is very small. The case referred to above

illustrates one of the dangers attending the operation of reducing old dislocations, and shows the necessity not only of always keeping these perils in view, but also of informing the patient and his friends with the fact that the operation is one of some gravity, attended with risk of serious complications.—*Lancet*.

LEAD POISONING.—Sugar of lead is sometimes used in preparing silk thread which is sold by weight and not by length. A means of detection is sometimes the sweet taste which sugar of lead silks possess. A case of lead poisoning of a sewing-woman, who held the silks in her mouth, is recently reported.—*Sanitary News*.

ARMY INTELLIGENCE.—*Official List of Changes of Officers serving in the Medical Department of the United States Army from September 22, 1883, to September 29, 1883.*—DE LOFFRE, A. A., Captain and Assistant Surgeon. Assigned to duty at Fort Niagara, N. Y. Par. 5, S. O. 182, Department of the East, September 27, 1883. — HAYARD, VALERY, Captain and Assistant Surgeon. Assigned to temporary duty at post of San Antonio, Texas. Par. 10, S. O. 120, Department of Texas, September 21, 1883. — REED, WALTER, Captain and Assistant Surgeon. Relieved from duty at Fort Omaha, Neb., and assigned to duty as post surgeon, Fort Sidney, Neb. Par. 5, S. O. 103, Department of the Platte, September 22, 1883. — SHANNON, W. C., Captain and Assistant Surgeon. Assigned to duty at Fort Bridger, Wyoming. Par. 3, S. O. 102, Department of the Platte, September 19, 1883. — APPEL, A. H., First Lieutenant and Assistant Surgeon. Assigned to temporary duty at Fort Warren, Mass. Par. 3, S. O. 181, Department of the East, September 25, 1883. — CARTER, W. F., First Lieutenant and Assistant Surgeon. Assigned to temporary duty at Washington Barracks, D. C. Par. 5, S. O. 182, Department of the East, September 27, 1883. — RICHARD, CHARLES, First Lieutenant and Assistant Surgeon. Relieved from further duty at Creedmoor, New York, to return to his proper station, Fort Adams, R. I. Par. 1, S. O. 180, Department of the East, September 24, 1883. — RICHARD, CHARLES, First Lieutenant and Assistant Surgeon. Granted leave of absence for two months, with permission to apply for extension of two months. Par. 1, S. O. 49, Military Division of the Atlantic, September 25, 1883. — WAKEMAN, WILLIAM J., First Lieutenant and Assistant Surgeon. Relieved from temporary duty at Fort Sidney, Neb., to rejoin his proper station at Fort D. A. Russell, Wyoming. Par. 5, S. O. 103, Department of the Platte, September 22, 1883.

NAVAL INTELLIGENCE.—*Official List of Changes in the Medical Corps of the Navy during the week ending September 29, 1883.*—Surgeon G. S. Beardsley granted leave of absence for six months, with permission to leave the United States. — Passed Assistant Surgeon A. A. Austin, orders to Naval Hospital, New York, revoked, and placed on waiting orders. — Passed Assistant Surgeon George C. Lippincott ordered to the Naval Hospital, New York. — Medical Director George Peck detached from the Naval Hospital, Mare Island, Cal., and placed on waiting orders. — Surgeon D. McMurtrie and Passed Assistant Surgeon M. H. Crawford ordered to report at Washington, D. C., October 3d, for Medical Survey.

SOCIETY MEETINGS FOR THE COMING WEEK.—*Monday, October 8th:* New York Ophthalmological Society (private); New York Medico-Historical Society. *Tuesday, October 9th:* American Academy of Medicine (New York—first day); New York Surgical Society; East River Medical Association (private); Jersey City Pathological Society; Newark Medical Association; Trenton Medical Association (private); Medical Societies of the Counties of Chenango, Greene, Oneida, Ontario, Rensselaer, Tioga, Ulster, and Wayne, N. Y., Bergen and Cumberland, N. J., and Litchfield, Conn. *Wednesday, October 10th:* American Academy of Medicine (second day); Tri-States Medical Association (Port Jervis, N. Y.); New York Pathological Society; Medical Society of the County of Cayuga, N. Y. *Thursday, October 11th:* New York Laryngological Society (private); New York Society of Medical Jurisprudence and State Medicine; Public Health Association of New York; Brooklyn Pathological Society. *Friday, October 12th:* Yorkville Medical Association (private); Medical Society of the Town of Saugerties, N. Y. (annual). *Saturday, October 13th:* New York Medical and Surgical Society (private).

Original Communications.

HYDATIDIFORM DEGENERATION OF THE PLACENTA.

By HENRY O. MARCY, M.D.,
BOSTON.

WHEN we remember the diversity of opinion yet held upon the development of the placenta, its histology, and even in relation to its important fundamental physiological functions, we can not consider it remarkable that there should exist the greatest of uncertainty and confusion of opinion relative to the morbid changes to which this organ is subject. Errors are perpetuated with wonderful pertinacity. Writers of text-books are seldom original investigators, and certainly could not be expected to have personally surveyed the entire field which they must go over in a systematic treatise. Thus one writer quotes from another, and often it is only after long research that the error is traced to its source.

When misconceptions of the anatomy and function of an organ prevail, and thereupon has been reared an erroneous standard of normal condition, it must ensue that departures therefrom called pathological can be held as of little value.

It is still generally taught that normally the chorial villi enter the utricular glands, and thereby there is formed a comparatively firm attachment between the ovum and the uterus. This error is repeated, and usually illustrated, in most obstetrical text-books, and yet it has been over and over demonstrated that the villi are larger than the mouths of the ducts they are supposed to enter, and that the relation is one of simple contact. Belief in such teachings would necessarily modify and possibly lead to wrong deductions in the study of abnormal conditions of the chorial villi.

Professor Ercolani has rendered a service to the profession of incalculable value in his studies of placental development, and his demonstrations, after long and careful research in the large field of comparative as well as human anatomy, are of the first importance to science. He shows conclusively that foetal alimentation in all mammals is carried on by a single universal law of physiological modality, that the foetal villus is simply a means of absorption of nutritive material, which is, in all cases, furnished by a glandular secretive organ of maternal development. The expression of this anatomical type is of the widest variety, and in woman, in the fully developed placenta, reaches a complexity of form confusing in the highest degree.

Charpentier* recognizes the confused and inaccurate opinions which have been hitherto held concerning the anatomical structure and development of the placenta as the chief cause of the doubts and uncertainties which pertain to its pathology; and, if this is true, it must follow that the very basis of pathological study is wanting. We can not intelligently observe the morbid changes which often

ensue until we shall have satisfied ourselves in reference to a correct anatomy and physiology of the organ, and then we find, even in these pathological departures, further proof of the correctness of the observations made upon the normal conditions of evolution. However, with this key to their better understanding, numerous and serious difficulties beset the investigator, and render the task one by no means of light fulfillment.

The different affections are found united in the various constituent elements of the placenta, or, rather, those which are found in one portion of the organ are different, either in their character or degree, from the changes in other portions. Oftener these diseases attack the maternal placenta simultaneously without our being able to establish any well-marked relation between them; as, for example, a disease of the parenchyma of the villi may be complicated with an entirely different affection of the glandular organ which envelops them. Again, the same lesions, well characterized, take on diverse appearances, and produce different results, according as the pathological changes have affected the portions of the placenta depending upon the period of initiation of the process in its relation to that of evolution. It will be easily understood how the fibrous changes in the maternal placenta must present various appearances dependent upon the period of development.

The chorial villi, which during the earlier months of pregnancy are developed over the whole surface of the chorion, are all composed of two parts—internal and external. The first, which was called by Robin chorial tissue, and by Virchow mucus or myxoma, is in direct contact with the chorion; the latter, which consists of an epithelial envelope, entirely surrounds it. The villi at the placental site increase normally in number and volume. Elsewhere they are arrested in their growth, and disappear by atrophy and fatty degeneration.

The decidua is at first a single bed of cells of new formation, and afterward proliferates to a remarkable degree at the placental site—the decidua serotina. The epithelial covering of the placental villi is perceived some time after they have been enveloped by the cells of the serotina, but disappears at an early period. Not seldom, in case of so-called mole pregnancy, the chorial villi, which should atrophy, increase in volume. Under these conditions the external epithelium does not atrophy, but proliferates, and has been mistaken for the internal surface of the epithelium furnished to the placental villi from the modified cells of the serotina.

At the later stages of pregnancy the examination of any remaining chorial villi shows them still covered with an epithelial layer, while the placental villi have lost this envelope and are formed only of the fundamental myxomatous tissue which incloses the foetal vessels, and thus the external parenchyma of the villi is in contact with the internal epithelium of the surrounding maternal glandular organ.

Virchow was the first to observe that the parenchyma of the chorial villi (called endochorion to distinguish it from the exterior epithelial layer, which, from its supposed relationship, was termed exochorion) is formed of mucous tissue which is found in abundance in the embryo during the

* "Maladies du placenta et de ses membranes," Paris, 1869.

earlier period of gestation. This tissue has the physical characteristics of mucus; chemical analysis has shown it to contain mucin; it is composed of a fluid stroma in which cells are suspended. This distinguished observer supposed that the hypertrophy of the chorial villi so frequent in abortion was caused by an increase of this tissue, and, when seen in a marked degree, there was produced the pathological condition called by Wedl and Robin "dropsy of the villi," or the hydatid placenta of earlier authors.

Thus the two diseases, hypertrophied villi and hydatid placenta, were supposed to be different degrees of an exaggerated development of the fundamental tissue which constitutes the villi. Virchow agreed with Wedl and Robin as to the location of the pathological changes, but included both under the term myxoma of the chorial villi.

The chorial villus may, by careful examination, be traced to its origin from the external surface of the chorion with which it is in close relation. It divides into three or four branches, and subdivides until the extremities are very thin, with their ends a little swollen, two or three times the diameter of its branch. These, microscopically, may be distinguished as formed of two parts, united yet distinct—an external epithelial layer, and the stroma or internal homogeneous embryonal tissue. Ercolani states that, if examined when the process of proliferation is yet active, it is easy to determine that they are developed from the external epithelial layer. H. Müller, in 1843, expressed the opinion that the pathological changes always began in the external envelope, and that afterward the endochorion was involved. We may also observe that the surface of the small pyriform portions which represent in the developing state the pedicellated vesicle of the hydatid placenta produces others equally pedicellated, a few of which show a small cavity in their interior. These observations, which may be easily verified, demonstrate the error in the teachings of Müller and Virchow.

The internal substance of the villi can not penetrate by pedicles, as Müller supposed, and thus, in an unknown manner, envelop the globular portion of the pyriform appendages and furnish to them the external fibrous membrane, when the fluid which they contain changes them into cysts. The hyaline liquid contained therein would seem to have nothing in common with the embryonal tissue of the stroma. The changes in and destruction of the cells of the deeper layers of the vesicles explain not only the increase in volume, but also the constant property of the fluid contained in them.

Ercolani states: "If these observations are interesting in regard to the anatomical knowledge of the placenta or hydatid mole, they will be equally of profit to the histologist, who will thus be able to establish a new scientific fact, viz., the progressive metamorphosis of the external epithelial layers at the same time with the retrogressive metamorphosis of the internal layer." The conclusions of Müller and Virchow may be affirmed, that the chorial hydatid or mole of pregnancy has its origin in the epithelium covering the villi, but that the parenchyma does *not* aid in the formation either of the external membrane of the cyst or of the liquid which it contains.

The study of the hydatid placenta has occupied the

attention of medical men since the days of Aristotle. The one fact made most apparent by the examination of all writers is their disagreement. Virchow recognized the cause of these contradictions in the imperfect knowledge pertaining to the formation or histology of the chorial villus. He teaches the identity between the chorial and placental villi, and thus himself is led into error. Myxoma of the villi, after it has reached the stage called placental, constitutes a mass more or less considerable, not seldom several quarts, of pedicellated, grape-like vesicles, varying in size and shape from a very small granule to that of a hazel-nut or pigeon's egg. There is no regular order of gradation; even the terminal ones may be the larger. The vesicles are filled with a colorless, slightly gluey liquid, which contains albumin.

The origin of the vesicles and their structure are still questions the solution of which is surrounded with many difficulties. From Virchow we learn that Ruysch attributed the development of the vesicles to changes which had taken place in the vessels. After a better understanding of the parenchyma became known, it appears that Grashuis believed that the cell-tissue of the parenchyma was the origin of the vesicles, a degeneration of the trunk of the tuft, or of its coverings. Velpeau seems to be the first who decidedly opposed the theory of vascular changes, and it did not appear to him that the vesicles were, in the ordinary sense, small cysts, but that the substance of the tufts was more like a sponge filled with fluid.

Joh. Müller declared that he had found them to be not cysts, but solid swellings of the tufts. Gierse and H. Meckel believed not only that the tufts were hypertrophied, but that this hypertrophy was complicated with œdema not unlike the ordinary œdema of anasarca.

Mettenheimer, on the contrary, attributed the beginning of the hydatid to a transformation of the cells within the tufts changing them into cysts, and in the outgrowths of these he saw the reason for their later grape-like formation. Paget accepted this view. Virchow declares: "Increase of the epithelium, which Heinrich Müller regarded as a beginning of cyst formation, I found to be the rule in normal as well as pathological growths. It is followed, after a time, by the bud-like development of the parenchyma. But only in the parenchyma, and not in the epithelium, does the especial change take place which leads to mole formation." According to Virchow, then, the process of development in all cases is an irritative one, with an increase of cells and nuclei. The cells which he has described as "physalides" are very commonly met with, but Schroeder van der Kolk has emphasized the fact that this character of cell is often found elsewhere, and Grailly Hewitt believes the real increase in size takes place independent of these cells. It is clear that in the degeneration of the chorial villi vascularization of the tufts is generally wanting. This may be taken as evidence that the pathological changes have their initiation before the development of the capillary loops of the villi, but it is true that vessels are generally present when the disease takes place in a later period of pregnancy.

Grailly Hewitt accepts the view of Aristotle, that more commonly the fœtus dies first, and certain developmental

changes occur, possibly, for months after. Such opinions are easy to demonstrate as fact, and teach a blind recognition of the maternal portion of the placenta and its relations with the fetal villi. I have frequently observed, microscopically, demonstrative evidence of the close contact of the chorial villi with the epithelial covering of the maternal vessels when the placenta has been undisturbed in its connection with the uterus for a considerable period after the death of the fœtus. The chorial villi have become shrunken, and are easily separated from the decidua sheath, the cells of which have undergone active proliferation. In one instance this was observed to have taken place, and continued in a stage of active development in a portion of a placenta removed three months after the expulsion of the fœtus.

That certain conditions of the uterus itself act as causes of hydatidiform degeneration would appear probable from the fact that many women are delivered of hydatidiform degenerated placenta in several successive pregnancies. Here the inference is clear that the initiative process is maternal and not fœtal, and, if this be correct, it would be idle to seek in a single cause (myxomatous degeneration of the fœtal villi, as Virchow would have us believe) for the explanation of all varieties of hydatidiform placenta. In this class of cases it may also be shown that the initiation of the pathological processes occurred only after the placenta had commenced its developmental changes. This is in contrast with the processes of pathological type which we have shown pertain to the so-called mole pregnancy, and which have their seat in the shaggy coat of the chorial villi when the maternal placenta is yet represented only by the decidua.

Ercolani states that "some have referred the observations made upon the hypertrophied chorial villi to the normal placental villi, while others have made the opposite mistake by referring the observations made upon these last to the hydatid placenta." . . . "There is no necessity of confounding, as has been done hitherto, the external epithelium of the healthy or diseased chorial villi with the external envelope of the placental villi, arising from the cells of the serotina."

When we consider that, histologically, the cells of the serotina form villi of secretion, and that in the human species the wide departure in their form from the fœtal villi lies in the fact of their becoming dilated into thin-walled pouches, which intoflect and receive into intimate union the chorial villi, it is a most interesting question to propound whether these, by any pathological change, can assume an hydatid form. Since the knowledge of the earlier writers was so inexact, their opinions must be regarded as of little value.

Depaul published, in 1868, an observation where the vesicles were in relation with the internal wall of the decidua. Martin, in one case, found vesicles upon the surface as well as in the interior of a very large placenta.

Pelvet examined an hydatid mole still shut up in the uterus, and maintained that the vesicles were attached at their extremities to the internal uterine wall. Ancelet, who quotes these observations, states that the vesicles hung suspended in the uterine cavity, detached from a membrane which clothed both the wall of the uterus and the mem-

brane of the ovum. His explanation, that the liquid secreted by the utricular glands pushed before it the decidua layer, although a wrong interpretation, does not controvert the fact he observed, and it is beyond doubt that vesicular clusters are suspended in the interior of the uterus, and that they originate from a membrane adherent to the uterine surface.

A most interesting specimen was exhibited in the pathological collection specially arranged in London at the International Medical Congress of 1881, which I carefully examined. The patient had for quite a little period suffered from uterine hæmorrhage, and the physician in attendance injected persulphate of iron into the uterus. Death followed very speedily. The autopsy showed that the iron had penetrated through the uterine walls into the abdominal cavity, and seemingly by openings into which vesicular hydatids had penetrated. They certainly appeared to occupy the uterine sinuses.

It must be assumed, as within demonstration, that the epithelium which always pertains to the maternal villi, although wanting to the fœtal villi, after the very early stages of placental development, is subject to the same laws of pathological modification as belong to the chorial villi, and that certain forms of hydatid placenta may, and doubtless often do, have their departure from the cells of the serotina.

LITERATURE.

- CHARPENTIER.—"Maladies du placenta et de ses membranes," Paris, 1869.
 R. VIRCHOW.—"Die krankhaften Geschwülste."
 WEDL.—"Grundzüge der pathologischen Histologie," Wien, 1854.
 ANCELET.—"Gazette des hôpitaux," 1868.
 JOH. MÜLLER.—"Archiv," 1843.
 PELVET.—"Bulletin de la société anatomique," 1865.
 DEPAUL.—"Mouvement médical," 1868.
 ROBIN.—"Société de biologie," 1854.
 FRED. RUYSCH.—"Advers. anat. prima."
 J. GRASHUIS.—Citirt bei Sandifort.
 VELPEAU.—"Revue médicale," 1827.
 H. MÜLLER.—"Abhandlung über den Bau der Molen," 1847.
 GIERSE and H. MECKEL, 1847.
 METTENHEIMER, in Müller's "Archiv," 1850.
 PAGET.—"Lectures on Surgical Pathology."
 SCHROEDER VAN DER KOLK, 1851.
 GRAILLY HEWITT.—"Trans. of the Obstet. Soc. of London," 1860.

THE PATHOLOGY OF ACUTE LOBAR PNEUMONIA

FROM A NEW STANDPOINT.

BY WILLIAM D. SCHUYLER, M. D.

Third Article.

A Dynamo-physico-physiological Disease.—Its Pathogenesis.—Its Functional Pathology.

(Concluded from page 379.)

The causes of what may be designated as the special asthenia of pneumonia are: In the early stages, an exaggerated waste of energy in the sthenic reactions organically developed to overcome the pulmonary circulatory obstruction, and an equal waste of energy in the local morbid pressure and counter-pressure set up. Imperfect nutrition

and the depressed nervous action alluded to contribute to produce early exhaustion. Fever, according to its degree and continuance, promotes asthenia. And, lastly, a special cause for exhaustion is the great destruction of blood which occurs through exudation and extravasation, which, as we shall see, amounts in many cases to from one fifth to one fourth, or a large proportion of the entire blood of the body.

The dangers which arise in the course of this pathological process are worthy of special mention. While they are of the gravest importance, often occasioning death suddenly, if not unexpectedly, they do not, as we shall see, result directly from the process itself, but are due to its indirect or secondary effects. They are functional, and occur through stress of necessary but generally exaggerated functional action. Dangers may arise at any stage of the malady, but are more frequent in the earlier or later periods. The early dangers grow out of interference with the respiratory function and the pulmonary insufficiency induced. The late dangers result more frequently from insufficiency of some part of the circulatory apparatus, especially of the right heart. Asthenia may also lead to general circulatory insufficiency, shown most in the peripheral circulation.

In regard to general pathology we may say: No malady presents a greater diversity or a more varied outline of symptoms than acute pneumonia. This fact of diverse expression is true of every manifestation of the disease, both as regards the extent of the local development and every constitutional symptom. Of the latter, although they form a characteristic and strongly marked group, yet any one, even the most characteristic, may be absent, or present only as a slight expression. This is true of the occurrence of malaise, of the chill, febrile manifestation, dyspnoea, cough sputa, pain in the side, etc. In some cases there is so little constitutional disturbance that the patient may scarcely recognize he is ill. These constitute, as I understand, the walking cases of Professor Flint. "The only constant element of the malady is the anatomical change in the lungs, which can be discovered only by a careful physical examination" (Jürgensen). Which statement, being true, constitutes a most significant fact for consideration relative to the essential element and factor in the disease, and particularly so coming from the author cited, who is a most pronounced and emphatic advocate of the constitutional infectious theory as the only hypothesis for its genesis.

The onset of an attack of sporadic acute lobar pneumonia, such as we are studying, may be gradual, but is quite if not more likely to be acute, in which the patient is suddenly taken, struck as by accident. There is generally a sharp chill, though this symptom, like all others, as stated, is not constant; it may be short, half an hour to two hours in duration, or much more prolonged, running over one or two days. Vomiting may occur instead of the chill in young subjects. In a typical case, following the chill there is a rapid accession of fever, denoted by a temperature rise that is quite pathognomonic; there is pain or discomfort in the chest; cough; muco-hæmorrhagic sputa; dyspnoea, with greatly accelerated respiratory movements. The position of the patient at this time is sitting or partly raised; or, if ly-

ing, the decubitus is on the affected side; his countenance is anxious and cyanotic; he speaks with difficulty and in jerky sentences. By the position taken he seeks to favor respiratory action and repress the movements of the chest. He has no appetite, his bowels are inactive, and his urine is scanty, but very high-colored.

The physical signs which denote the only constant element in pneumonia may be recognized, in part, very soon after the occurrence of the chill; or they may be delayed especially those signs which are most characteristic, for several hours, a day, or even longer. Their occurrence depends upon the rapidity of the formation of the local process; and, as we shall see, when we come to the study of morbid anatomy, its development varies with every possible shade and degree of difference in different cases. Complete consolidation, with which development ceases, may be perfect in twelve hours, or it may require several days. Hence the varying time of its different expressions.

Generally auscultation, made with due care soon after the chill, and possibly just prior to it, will reveal at the affected point diminished intensity of the respiratory sounds, especially of the inspiratory, while the expiratory will probably be found prolonged and slightly bronchial in character. Again, respiration may be somewhat harsher in character than normal in the affected locality, throughout which there may also be heard scattered subcrepitant râles. The voice-sounds will probably be somewhat exaggerated. Percussion may or may not elicit dullness, according to the depth of the lesion and the condition of the superimposed lung-structure. After the first twelve hours, however, or at some period up to the end of the second or third day, the characteristic and clearly pathognomonic signs, consisting of more or less complete absence of the vesicular respiratory murmur, dullness on percussion, bronchophony, bronchial breathing, and possibly subcrepitant râles, will be obtained. A crepitant râle is held, generally, to be diagnostic. Although this sign occurs, most probably, in the course of every consolidation, yet, as for natural reasons it may be absent in any one case at the time examination is made, I consider it as of less value in a diagnostic sense than bronchial breathing, which symptom is constant, and its characters are most striking; especially are its tubular metallic note, its diffuseness, and its seeming, almost startling, nearness to the applied ear. The presence of this tubular breathing, developed recently over a limited or more extensive but connected area of the chest, concurring with the group of constitutional symptoms referred to, makes a diagnosis of pneumonia most certain.

The general symptoms, once developed, continue, possibly in a lessened degree, possibly increasing in gravity, up to the fifth, the seventh day of the malady, or later, when, in a large proportion of cases, they suddenly abate. The respiratory movements now become quite normal; the pulse diminishes in frequency, possibly from one hundred and twenty, or thereabouts, to one hundred, eighty, or even sixty; the temperature falls to normal or below; the mind appears relieved, the countenance brightens, and the patient, for whom much anxiety was entertained on account of the growing gravity of his symptoms, now expresses himself as

well. These striking phenomena combine to make up what is recognized as the crisis of the malady. Its occurrence indicates that resolution is going on rapidly, and is somewhat advanced; also that the functions which have been inhibited or greatly taxed are being normally resumed. Where degeneration and softening of the exudate for any cause are slow, this striking change does not occur, and resolution is said then to be by lysis. The former, by crisis, is the more natural, or frequent, mode of resolution in typical cases.

Previous to crisis, for a few hours or a day or more, physical examination will detect a resolvent action going on; bronchial breathing will have become less perfect, less metallic, softer; and developing râles, at first fine, then coarser, and of all grades—the *râle redux* of this malady—will be heard. Again, just prior to crisis, the constitutional symptoms may become aggravated and more grave, but afterward, as stated, they singularly abate with its occurrence.

The various symptoms, their cause and importance, or sequence, including especial consideration for the cause of fever, of dyspnoea, and the frequency of the respiratory movements, recession of fever, especially its marked deferrescence, including, also, the entire phenomena of crisis, and a general descriptive course of the disease, will be given, as stated, in a section on "symptoms and course." The different terminations of the malady will be referred to in order.

Convalescence from pneumouia is generally rapid, though in many cases, on account of asthenia, predisposing and resulting, it may be prolonged. In from two to four weeks a patient may be permitted with safety to resume his vocation. One attack of pneumonia predisposes through local debility to a second; therefore, prudence dictates that time be given for complete recovery.

As has been claimed, to the formation of the local process, an obstructive, physical cause, are the pathological results noted to be attributed: The obstruction of the systemic blood, the consequent local filling of the afferent vessels, damming and setting back of the blood, due also to its continued influx, the cyanosis, stress upon the vessels within the lung, and particularly upon the right heart, the mental condition, delirium, etc., from the presence of carbonized blood in the cerebral vessels, the respiratory difficulties which occur, imperfect nutrition and early exhaustion, and particularly cardiac exhaustion—all result from the obstruction of the great, concentrated circulating current of blood by the local process.

Furthermore, as we shall see, the self-limitation of the malady is the result of the physico-anatomical events as they occur in turn, in the order of cause and sequence from the initial lesion, and govern physiological action; and lastly, as we shall further point out, it will be seen that an abatement of every constitutional symptom is due to the histological changes which occur in the rapidly degenerating exudate, as such results mechanically relieve the two functions, circulation and respiration, which its presence has so seriously inhibited. As I have shown it to be, and shall further trace, the cause of the characteristic symptoms of

this malady is the obstruction of the systemic blood in the lungs; and the cause, on the contrary, of their cessation is found in the removal of this obstruction.

A CASE OF POISONING BY SULPHATE OF IRON.*

By LUCY M. HALL, M. D.,

RESIDENT PHYSICIAN TO THE REFORMATORY PRISON FOR WOMEN, SHERBORN, MASS.

S. B., aged forty, born in Ireland, single, was committed to the prison for larceny in June, 1882. She was of medium size, and thin in flesh; her circulation was very active, and her general health was good, but her mind was greatly disturbed. She did not eat or sleep well after her commitment. During the third week she complained of diarrhœa.

July 24th.—She was admitted to the hospital for diarrhœa, accompanied by nausea and vomiting, with severe pain in the abdomen. As bowel affections of various kinds were prevalent at the time in the prison, no especial importance was, at first, attached to this case. Examination of the discharges, on the day following admission, revealed the fact that they emitted not the slightest fecal odor; they were greenish in color, and of watery consistence. The breath was cold; the tongue slightly furred, pale, and cool; the mouth was dry, and imparted a peculiar, glassy feeling to the touch. The temperature under the tongue was 95° Fabr., in the vagina 99°; the pulse was weak and irregular, 100 to 108. There was extreme nausea, and efforts at vomiting were frequent; there was also severe pain in the abdomen, culminating in the rectum, with tenderness on pressure, most marked over the sigmoid flexure of the colon.

Poisoning (intentional) by sulphate of iron was suspected, but was stoutly denied by the patient. Subnitrate of bismuth and tincture of opium were injected into the rectum with a little warm water; a hypodermic injection of sulphate of morphine was made over the point of greatest pain; hot flaxseed poultices were applied over the bowels. Sixteen grammes of castor-oil, with six of laudanum, had been given before the patient was removed to the hospital.

The history of the four days next following presents but little variation. Nothing was retained by the stomach except at one time a little brandy and water.

30th.—The pulse was feeble and irregular, 104 to 108; the temperature under the tongue, 96.5°. The tongue was still cool, and now thickly furred. The mouth still presented a dry, cold, glassy feel. Pain and tenderness in the abdomen was undiminished. The hypogastrium was hard and inelastic on palpation; there was no tympanitis. One flaky, dark brown discharge took place, very slightly fecal in odor.

31st.—There was a small watery stool containing black specks and flakes; odor as before. There was a discharge of bright red blood from the uterus. The last menstrual period occurred eleven days previously; menstruation had always been regular.

August 1st.—She slept a little for the first time since admission. Pulse 110, weak and running. Patient perspired freely; vomited frequently a strongly acid, colorless fluid. There was retention of urine. The skin was bathed in hot water, to which a little dilute sulphuric acid had been added. A catheter was used, and 150 c. c. of urine were drawn. Its specific gravity was 1.025, its reaction was slightly alkaline, and it was heavily loaded with phosphates.

2d.—The abdomen was greatly distended below the umbili-

* Read before the New England Hospital Medical Society, June 22, 1883.

cus; the epigastrium was retracted. There was a dry brown stripe in the central line of the tongue; pulse 96, temperature normal. Ice-bags were applied to the abdomen, with some relief to the pain.

3d.—She complained of *pain in the stomach* for the first time. No medicine nor food was retained upon the stomach. The urine was scanty and high-colored. 3.15 p. m.: A copious discharge from the bowels occurred without the knowledge or control of the patient. It was fluid, containing floating specks of semi-solid matter faecal in odor; reaction neutral. The patient was greatly excited. A nourishing enema was given and retained, pressure being made upon the anus for one hour.

6th.—The patient slept a little during the night. The left side of hypogastrium was more distended than the right, was painful, tender and indurated, and dull on percussion. All substances were immediately rejected by the stomach.

7th.—The tongue was brown and dry in the center, and thickly furred. The patient seemed more ill than upon any previous day. She had no control over the discharges from the bowels or bladder. She passed large liquid stools, containing a greenish-black, finely divided, flaky substance.

8th.—The pulse was weak, 120; the temperature, 97.4°. The abdomen was less distended; there were great pain and soreness in the region of the stomach. The surface of the body was very cool to the touch.

12th.—The odor of the breath was strongly faecal. At 7.45 p. m. the patient vomited a dark, greenish-black fluid, containing black specks almost identical in odor and appearance with those in the discharge from the bowels. Frequent vomiting (faecal), and involuntary movements from the bowels occurred till 10 p. m. Copious draughts of hot water containing a small amount of bicarbonate of sodium were given; also an enema of oil of turpentine, 1 grm., warm water, 60 grm. (The latter returned accompanied by much flatus.) The patient was weak and nauseated during the night. She retained a little brandy and white of egg given by the stomach; also a portion of the nourishing enemata administered every six hours was retained.

13th.—She acknowledged having taken sulphate of iron. She said she was sent to the bath-room on July 20th, when she took a handful of the copperas used for disinfecting purposes, and chewed and swallowed it as rapidly as possible; she did not know how much she ate—probably two ounces. She soon became partially blind, deaf, and dizzy, with a sensation of numbness all over her body; her legs seemed half-paralyzed, and she could walk with difficulty. She asked to be allowed to remain in her cell, but refused to see the doctor, and was finally brought to the hospital much against her will.

14th.—She complained of a burning sensation in the stomach, more intense than at any previous time. She said her "whole insides felt sore and raw, while in the stomach a great fire seemed burning." Pulse 80, temperature 99.6°. Tongue clean. She vomited matter faecal in odor and of acid reaction. There were frequent stools.

15th.—She was restless during the night. Her feet and legs were cold. Pulse 106, temperature 98.6°; tongue hard, brown, and dry. She vomited almost incessantly. Cracked ice, in free quantities, was given, but returned almost immediately as hot water. The epigastrium was much distended (had been retracted up to this time, so that the space between the umbilicus and the xiphoid cartilage had presented a decided concavity). Ice was applied over the stomach. Tincture of digitalis, 1 grm., and sulphate of quinine, 5 grm., were added to the enema. 8.45 p. m.: She had a severe chill.

16th.—She had no sleep; the tongue was dry; the pulse 96, temperature 99°. 3 a. m.: Stercoraceous vomiting occurred, accompanied by frequent stools. 5.30 a. m.: She vomited a

bright green fluid not faecal in character. The stools were liquid, dark green, and very offensive in odor.

17th.—She was more quiet during the night. 8 a. m.: There were vomiting and purging. Pulse 112, temperature 99°. Sulphate of morphine, 0.01 grm., was given subcutaneously. The epigastrium was still much distended. There was urticaria upon the legs and body. She was very peevish and nervous. She was forcibly restrained in bed and carefully guarded. A little milk and lime-water were retained by stomach.

18th.—Pulse 102, temperature 99°. The stomach was too irritable to retain anything. Nutritive enemata were continued.

22d.—She complained of intense burning pain over the cardiac end of the stomach; the vomited matter was an acid mucus of greenish tinge; the tongue was more moist; she was menstruating. The tenderness, pain, and distension of the abdomen continued, being more marked over the sigmoid flexure of the colon. Nothing was retained by the stomach until August 27th, when a little white of egg beaten to a froth was kept, also a little beef-tea.

31st.—There was a large fluid stool containing faecal matter and shreds of intestinal mucous membrane. Intestinal glands were found under the microscope upon examination of the dejected membrane.

September 2d.—Abdominal pain was very severe. Sulphate of morphine, 0.02 grm., was administered subcutaneously. From September 3d to 6th the patient remained about the same, passing several small bloody stools and complaining of much pain.

6th.—3.30 p. m.: There were sharp cutting pains, especially referred to the old point of soreness over the sigmoid flexure, followed by a slight discharge of bright-red blood. 6 p. m.: The patient was delirious. A large quantity of blood passed, mingled with shreds of mucous membrane. Turpentine emulsion, 4 grm., water, 4 grm., was thrown into the rectum, but immediately returned with a large quantity of dark blood. Ice-bags were applied to the abdomen. R. Plumb. acet., 65 grm.; acid. acet., 5 grm.; morph. acet., 0.03 grm.; aqu. pur., 130 grm. M. S. Inject into the rectum, with the hips elevated. Maintain pressure upon the anus for two hours.

7th.—No discharge from the bowels occurred after the enema of acetate of lead, etc., until 7 a. m., when the patient passed a small quantity of dark blood mingled with some of a brighter color. No further hæmorrhage occurred until September 12th, when the patient had a severe chill, with a weak, rapid pulse, followed by a faecal discharge in which much dark-colored blood was clearly intermingled. The enema of acetate of lead, etc., was repeated as before. Afterward the extremities became cold, and the pulse almost imperceptible—120 to 140. Nervousness was extreme. Sulphate of quinine, 12 grm., in capsule, was retained by the stomach. Whisky, 8 grm., beef-tea, 32 grm., were administered per rectum, but returned mingled with much dark blood. All nourishment was rejected by the stomach. 6 p. m.: Exhaustion was extreme. Hæmorrhage from the bowels continued. Astringent enema was repeated as above. The patient was still delirious.

13th.—There were frequent stools, but no blood. The pulse was 98, the temperature 98.6°. Bismuth subnitrat., 1.5 grm., opii, 0.1 grm., was ordered to be given every four hours.

15th.—6.45 a. m.: There was a large bloody stool. The pulse was 140, and very weak; the patient was flushed in the cheeks, delirious, and tossing wildly about; she was kept in bed by force; she seemed in great agony; her knees were drawn up and body bent forward. Nothing was retained upon the stomach. Sulphate of morphine, 0.06 grm.; fluid extract of hyoseyamus, 5 grm., were given per rectum, and repeated in four hours. Two hours later she fell asleep, and the respirations fell to three in the minute, but she could be roused and made

to swallow. The pulse was 90 to 108. Afterward the respirations improved, and the patient slept quietly.

16th.—Pulse 120, temperature 97.5°. A little brandy and beef-tea were retained by the stomach.

18th.—She slept more naturally than at any time during the illness.

20th.—She became very nervous at about 1.45 P. M., and complained of severe pain in the abdomen, referred especially to the former point of soreness (to the left of and below the umbilicus). A nervous chill occurred, followed by free vomiting. Her legs and feet were cold and clammy. Pulse weak, 108. Hot bottles and blankets were applied to her legs and feet. Fluid extract of hyoscyamus, 0.5 grm., bromide of potassium, 2 grm., and water, 30 grm., were given per rectum. 5.30 P. M., she was more quiet.

22d.—There was incontinence of urine (constant dribbling); the bladder was found to be nearly empty.

26th.—There were four stools, in which much mucous membrane was mingled; evacuations were accompanied by excruciating pains. Subnitrate of bismuth, 2 grm., opium, 0.1 grm., in capsules, were given by the mouth; they were retained. 7.30 P. M.: The pulse was 120, the temperature 99.9°; the patient was delirious and excited; there was free hæmorrhage from the bowels. An enema of acetate of lead, etc., was given as before.

28th.—Hæmorrhage took place from the bowels. The patient was weak, nauseated, and restless. Astringent enema was repeated.

30th.—There were no further hæmorrhages. She complained of much pain over the sigmoid flexure. Light fluid nourishment given by the mouth was retained.

The improvement was steady, but very slow, from this time. The abdomen remained tympanitic, the stomach irritable, and the bowels loose and irregular.

October 21st.—Great soreness in the abdomen was still complained of; respiratory movements caused pain; the abdomen was swollen and tense; the iliac region especially hard and inelastic. The patient said that her bowels never felt warm and natural, but seemed like a cold, hollow tube, through which some fluid was trickling. Soft gelatin capsules passed through the alimentary canal so rapidly that they were discharged from the anus undissolved. Taking of food or drink was followed almost immediately by a discharge from the bowels, the ingesta last taken appearing in the stools.

December 10th.—Her appetite was good; the action of the bowels was irregular, but the stools were of good color and consistence. The abdomen was still tender to pressure, and of a hard, gristly feel over the lower portion. The patient was thin in flesh, but gaining daily.

In reviewing this case, the fact that at the time the poison was taken the alimentary canal was comparatively empty from previous fasting and diarrhœa should be taken into consideration, as on this account the action upon the mucous membranes by direct contact was much intensified.

The special points of interest in the case are the following:

1. The almost immediate action of the poison upon the nerve-centers, causing blindness, deafness, dizziness, numbness, and motor disturbances.

2. The length of time which elapsed after the ingestion of the poison before its action upon the intestinal canal was manifested.

3. Intense action at the sigmoid flexure.

4. The long period of inactivity of the salivary and other buccal glands.

5. Absence of pain in, and apparent contraction of, the walls of the stomach for twenty-five days after the taking of the poison, followed by acute inflammation.

6. Stimulation of the uterus (causing a return of the menstrual flow eleven days after a regular period).

A POSSIBLE RESULT OF HOT VAGINAL INJECTIONS.

By T. NAYLOR BRADFIELD, M. D.,

GYNÆCOLOGIST TO THE WOMEN'S AND CHILDREN'S HOSPITAL, NEWARK, N. J.

A MATTER of much interest to me, and one which, if anywhere previously mentioned, I have failed to notice, is a possible consequence following the long, persistent use of hot-water vaginal injections.

A girl, twenty-three years of age, the subject of an hæmatocele extending from Douglas's cul-de-sac over and above the bladder to within three inches of the umbilicus, was ordered hot carbolized-water injections, continued for an hour, and repeated no less than two or three times a day, the temperature never exceeding 100° F., or being allowed to fall below 90° F.

Six weeks succeeding the adoption of the hot vaginal injections the patient complained of increasing numbness down along the inner side of the lower limbs, with pain in the knees (notably the left), and a constant tingling of the toes, these symptoms gradually increasing until a week later, when the power to stand or walk alone was entirely lost, the patient, by great effort, being only able to hitch, or spasmodically drag her feet, when supported on either side by strong assistants.

Supposing the vaginal injections of hot water and the loss of locomotive power to have some near relation in the matter of cause and effect, the injections were discontinued for eight or ten days, with some return of strength and other decided improvements in the use of the limbs, a relapse into her former helplessness speedily following a renewal of the injections.

Dr. Thomas Addis Emmet, who had early confirmed my diagnosis of hæmatocele, was given a report of the case, with my views concerning the probable cause of the paralysis, which, as it appeared, was an opinion, however unreliable, somewhat original with myself. Dr. Emmet informed me that he had neither seen nor could remember any similar case, or, at least, where the use of hot-water injections had produced, or could reasonably be accused of producing, symptoms like those above described, and suggesting as a more likely cause of the paralysis the great size of the tumor, and the pressure necessarily exerted upon the pelvic vessels.

A most reasonable objection to this theory of causation (in the present case, of course) was the long time during which the patient was known to have suffered with this tumor (fully two years), and the absence of all symptoms prognostic of paralysis up to the time already mentioned, or, after the persistent use of hot vaginal injections for a period of six weeks, and when the process of softening,

together with much improvement in the circulation of the pelvic vessels, was well begun.

The adoption of hot-water injections in the treatment of pelvic diseases having become almost universal in gynecological practice, the subject to which I call attention is certainly one of interest to the profession, and may, if my views appear reasonable in the case above cited, be studied with some benefit to our patients.

Clinical Reports.

NEW YORK HOSPITAL.

TRACHEOTOMY FOR THE EXTRACTION OF A TOOTH FROM THE LEFT BRONCHUS; WITH REMARKS ON FOREIGN BODIES IN THE AIR-PASSAGES.

BY ROBERT F. WEIR, M. D.

SEPTEMBER 13, 1883, Dr. Weir spoke as follows:

GENTLEMEN: The patient before us, a girl twenty-five years of age, while having a wisdom tooth extracted, two weeks ago, under the partial influence of an anæsthetic, made a sudden movement which caused the dentist to lose his grasp of the tooth, and it fell down into the windpipe. Dyspnœa at once supervened of quite an urgent character. The violence of the cough gradually subsided, recurring with lengthening intervals from the use of morphine subcutaneously administered. She was seen by me about a week after the accident, and the exact location of the tooth was easily determined, by auscultation, to be in the left bronchus, on a level with the sixth dorsal vertebra, and about two inches to the left of the median line. Considerable reluctance was felt by the patient to submit to an operation, since her symptoms have not been of an urgent nature, not exceeding more than six or eight paroxysms of severe cough in twenty-four hours. There have been no signs of acute inflammation developed, though there is at times a great deal of whistling noise heard over the upper portion of the left lung, and none over the lower. This the patient is able to appreciate herself, except that while walking about it disappears. There is absence of vesicular murmur over the lower portion of the lung.

Before further considering this case, let me show you this specimen, which was obtained from a patient upon whom I was operating several years since, at St. Luke's Hospital, for necrosis of the lower jaw. During the course of the operation it was necessary to extract a tooth, and, as the patient was behaving very badly under ether, coughing and struggling, the tooth fell from the grasp of the forceps, but was supposed to have been immediately ejected during a fit of coughing. Not until two days later did symptoms manifest themselves indicating that the tooth had entered the air-passage. Dr. Leaming then diagnosed the location of the obstruction deep in the left bronchus, and the patient was advised to have it removed; but he obstinately refused to submit to an operation, and shortly afterward died of broncho-pneumonia.

In the present case, as it has been fourteen days since the accident occurred, and as there have been no signs of inflammatory reaction, you might ask, Why should we interfere? If I could feel assured that there would be no further trouble, I would not interfere. But we know, in the first place, that the tooth may become dislodged from its present location, and, by striking or lodging in the larynx, cause such spasmodic action as to imperil life; or, if it remained *in situ*, it would in the course of time set up inflammatory action, and thus cause a fatal

termination; for you will find that, in nearly all of the cases mentioned in the literature of the subject where the foreign body has remained lodged, the patient has passed through a series of acute troubles, often terminating in consumption. Hence the result of the consultation of the surgeons to advise prompt operation.

I shall first see if the tooth can be dislodged by inverting the patient, an assistant raising her by the feet, while percussion is made over the chest before and behind. Before doing this the patient will be etherized, and for two purposes: first, to diminish the sensitiveness of the larynx, so that, if the tooth becomes dislodged and strikes against the glottis, it will not cause so intense spasmodic action as if it were done without an anæsthetic; and, secondly, so that, if it becomes necessary to perform laryngotomy or tracheotomy, the operation can be proceeded with all the more quickly. If I fail to dislodge the body, I shall have to "fish" for it, to use a homely term, by making an opening into the trachea low down, so as to get as close to it as possible, opening the lips of the tracheal wound, introducing properly curved instruments, seizing the tooth, and extracting it. Now, this is no easy thing to do, as I experienced in an analogous case the day before yesterday. A child two years of age held a coffee-bean in its mouth, suddenly drew it in, and immediately had great difficulty in breathing. It was taken to the Chambers Street Hospital, where a tracheotomy was begun; but, after the incision through the skin had been made, the breathing became so much relieved that it was supposed the obstruction had been coughed up, and the operation was not completed. When the child was transferred to this hospital, some hours later, there was some difficulty with the breathing, although not extreme. Tracheotomy was performed, but, before the trachea had been opened, the child, being under ether, suddenly ceased to breathe. This accident, I may remark, is more apt to occur in operations about the mouth or neck when an anæsthetic is used. In four cases in which it has occurred in my hands, however, breathing was re-established by artificial respiration after the trachea had been opened. The patients recovered. It was so in the present instance. I was unable to detect the bean in the larynx or trachea, though the latter was carefully explored to its bifurcation. It must, therefore, have been in a bronchus. The child was sent down stairs, a large tracheotomy tube being allowed to remain in the artificial opening. In a short time word was sent up to me that the child was breathing peculiarly. I went down, withdrew the tube, drew open the edges of the wound to which threads had purposely been left, and the coffee bean popped out. In some cases the foreign body has been expelled through the artificial wound some days, or even some months, after the operation; and in some instances it has been necessary to perform tracheotomy a second or a third time.

You will now observe that the first method—inversion of the patient's body, with smart pounding on the thorax—has proved unsuccessful. Tracheotomy will therefore be performed as low as possible. For this purpose a large bottle will be placed under the patient's shoulders, in order to throw the head strongly backward and lift the larynx upward. The opening is made sufficiently ample to admit the finger, but the trachea itself is not large enough to permit its introduction as an explorer. To hold the lips of the tracheal wound apart, to afford a ready exit to the foreign body in the fits of coughing which now seize the patient, as well as to permit the easy entrance of the forceps, a silk suture is carried through a tracheal ring on each side and held by an assistant. On introducing a slender dressing forceps, bent at four inches from its end to an obtuse angle, the foreign body can just be felt at a depth of four inches and a half, with the rings of the forceps inclined to the right side—but the tooth escapes the grasp of the instrument. With a somewhat

differently bent instrument the same result ensues. A twisted copper wire, with an open loop at the end, answers no better. The loop is then bent upward, like a hook, without success. After several trials of this sort, attended, as you see, with considerable convulsive cough, it is determined not to protract too long efforts, which might end in excessive inflammatory reaction; but the use of two comparatively milder measures will be tried before abandoning surgical interference. These are to attach a number of looped threads to the end of a wire, in the hope that, when introduced, one of the loops may catch on the tooth and dislodge it; and the other, which will be tried while the first is being prepared, is to pass down a long untwisted loop of slender, very flexible silver wire. Of course, with such a method you can not feel certain whether the end of your instrument will go into the left or right bronchus. Happily, the chance is justified, for I've "caught my fish." On tightening the wire, considerable resistance is felt, so that I shall introduce on the wire, as a guide, the forceps first employed, and, as you perceive in the completion of the manœuvre, the foreign body has luckily been extracted—not, however, by being seized by the forceps, but by the pressure of the forceps above on the wire beneath fixing it sufficiently to permit its satisfactory withdrawal. From the direction of the wire, it would seem as if the tooth had been imbedded in the anterior wall of the bronchus. The swelling of the face, which has just been noticed, is found to be due to emphysema. The crackling sensation produced by the air under the skin can be felt also in the neck and on the upper part of the thorax. This may be due to the air having been driven under the skin at the tracheal opening, or, what is more probable, to a lesion of the deeper air-passages either from my instrumental manipulation or from a laceration produced by the extraction of the tooth itself. The latter is an irregular half of the wisdom tooth. The emphysema will not require any special treatment. The tracheal opening is allowed to fall together, but the silk traction loops will be left *in situ* until to-morrow morning, in case it should be necessary to introduce a tube. This was found to be a wise precaution in the child's case already cited. The upper part of the skin wound will be closed with a continued catgut suture, and six layers of gauze, wrung out of hot water, will be kept over the opening and frequently changed.

Two final points I beg to call your attention to. They are the isthmus of the thyroid gland and the situation of the opening in the trachea. The thyroid isthmus, which you may have noticed at the upper limit of the incision, was very large and much distended; in fact, a slight wound of it caused quite free bleeding until controlled by a forceps pressure forceps and a catgut ligature. Usually this portion of the gland, according to my experience, and particularly so in children, can be torn through or roughly pushed out of the way without much hæmorrhage. Here the contrary would have been the result. In reference to the opening in the trachea, you saw where it was when the patient was in position with the head hanging back. Now that the supporting bottle has been removed, you notice that the opening is extremely low down, so that its lower border is actually behind the sternum. In other words, the trachea was lifted nearly three quarters of an inch by the extension resorted to. Of course, the trachea is here at a considerable depth from the surface, and in this lies a danger to the patient from sinking or burrowing of matter behind the sternum—not a great one, it is true, but of some moment. She will therefore be encouraged to lie as much as possible on her side. The progress of the case will be announced to you at the next clinic.

Note.—September 22d.—The patient has passed uninterruptedly toward recovery, having only a slight bronchitis to contend with. The tracheal opening closed on the sixth day, and she is now going about the ward.

Book Notices.

A System of Surgery, Theoretical and Practical, in Treatises by Various Authors. Edited by T. HOLMES, M. A. Cantab., Surgeon to St. George's Hospital, etc., and J. W. HULKE, F. R. S., Surgeon to the Middlesex Hospital, etc. Third edition, in three volumes, with illustrations. New York: William Wood & Co., 1883. Pp. xxxi-1,109; xxiv-964; xxix-942.

Second Notice.

THE first part of the second volume is devoted to the eye, and is signed by Dixon in the last edition and by Dixon and Hulke in this. It covers one hundred and twenty-five pages, and is illustrated with lithographs. Diseases of the ear are treated by Dalby in the following chapter. Affections of the Muscles includes hypertrophy, degeneration, atrophy, pseudo-hypertrophic paralysis, and tumors; while under diseases of the tendons and bursæ we find good articles on ganglion and paronychia tendinosa. On Diseases and Injuries of Nerves we find the name of Brown-Séquard, 1882, joined to that of J. Lockhart Clarke, 1870. The article deals with the effects of the various injuries and the proper treatment of each, and is short for so large a subject. But Part II of the same subject, by Brown-Séquard alone, deals with the remoter consequences of nerve-lesions, such as epilepsy, tetanus, hydrophobia (the symptoms of which are held to depend upon the local effect of the virus on the wounded nerves), and paralysis. Believing as he does of the cause of hydrophobia, the author carries the belief to its legitimate conclusion—"that some chance of cure might be obtained by division of the irritated nerves." Under this heading the author also includes collapse, *tie douloureux*, aphasia, coma, apoplexy, muscular atrophy, hypertrophy, and various alterations of nutrition and secretion, all of them occasional remote effects of nerve injuries. Under Part III of the same subject the suture and stretching of nerves are considered, and locomotor ataxy is considered under a special heading, a trifle over three pages being devoted to it.

Under Orthopædic Surgery, by W. J. Little, we find the various forms of club-foot all well illustrated, with their treatment; the spastic contractions from cerebro-spinal disease in infancy and childhood; Dupuytren's contraction; wry-neck; knock-knee; and ankylosis of the articulations. Diseases of the Bones have been considered by the Editor, and Diseases of the Joints by Arthur E. Baker. Both subjects are exhaustively treated in as little space as possible. The figure on page 364 is particularly interesting as showing the change in the position of the limb which is caused by the simple injection of the hip-joint with water. The diagrams illustrating the deformity produced by coxitis are also exceedingly instructive, and the whole subject shows that careful study which its importance demands.

Dr. Baker also contributes the first part of the chapter on Diseases of the Spine (spinal caries), and Dr. Little the second, on Scoliosis and Lordosis. The subject of Surgical Diseases connected with the Teeth is treated by Salter. Avoiding what may be considered as Dentistry, he deals fully with such matters as alveolar abscess, tumors of the gum, tumors of the tooth pulp and the hard tissues of the teeth, abscess of the antrum, dentigerous cysts, alveolar and maxillary necrosis, and the application of obturators and artificial palates.

The articles on Diseases of the Mouth, Pharynx, and Oesophagus are contributed by Pollock; those on Diseases of the Tongue, formerly by Holmes Coote, have been rewritten by E. A. Barker; those on Diphtheria and Croup are from the pens of A. W. Barclay and Warrington Haward; the one on Diseases of the Nose is also revised by Haward; and the one on Diseases

of the Larynx is by Durham, revised by Hensman. Together they cover something over two hundred pages, and include everything from Quinsy to Expistaxis, from Cancer to "Annulus Migrans." We notice particularly the subjects of cleft-palate, tumors of the jaws, leucoplakia, the table of sixty cases of removal of cancer of the tongue, and the various operations for cancer, as containing the latest information on these subjects.

The chapter on Diseases of the Intestines is by Pollock, that on Hernia by Birkett, and that on the Rectum by Henry Smith. The greater part of the former is devoted to the consideration of the subjects of intestinal obstruction, stricture, and the excision of cancer. Upon all of these questions the author is inclined to the safe and conservative side, and what he has written may safely serve as a guide to the general reader. Under Hernia we observe little that is new, and Mr. Smith has, apparently, been so cramped as to space that he has simply outlined the salient points in Diseases of the Rectum. The remainder of the second volume is devoted to Diseases of the Skin, which are divided into general and local. The former are treated by Jenner, Millier, and Nayler, in 1876, and by J. S. Bristowe, 1882; the sections on local diseases (corns, bunions, warts, boils, carbuncle, malignant pustule) are contributed by Thomas Smith, 1871, and Rickman J. Godlee, 1882. It would appear as though a very interesting discussion might be held upon the propriety of considering either a boil, a carbuncle, or charbon as a local skin affection.

The Essentials of Pathology. By D. TOD GILLIAM, M. D., Professor of Physiology, Starling Medical College, etc. Philadelphia: P. Blakiston, Son & Co., 1883. Pp. 296. [Price, \$2.]

This is a curious book. In the first place, it has a title which excites query. What is meant by "The Essentials of Pathology"? Of course, they must be the "fundamentals of pathology," mentioned by the author, but in this way one is thrown from Scylla to Charybdis, and, if, in searching for the "fundamentals," the reader does not find himself seated in the sea instead of passing safely between these portentous rocks, he will be lucky.

"Some departures from the ordinary have been made in the arrangement of the work." It may be that the author reasons well, else whence these pleasing thoughts concerning the authorship of a book? The departures, however, must be in the text, and not in the illustrations, for the latter are chiefly from Rindfleisch, and have been taken without credit. Perhaps this is one of the "departures from the ordinary." If so, it will not bear repetition, unless upon the ground that Rindfleisch is now out of print, and it is desirable to perpetuate that author's memory. There is so much in this book that is so nearly like what has already been published in several works which are readily accessible that the question is suggested, Why was it published? Of course, the author's shading is evident, but it constitutes so thin a film that an adjustable objective is not required to look through the covering. But there are other curiosities here. For example, the author says: "Occasionally there is a nuclear division without a corresponding division of the cell substance. The cell enlarges, however, in the same ratio of growth, and, as a consequence, there results a larger mass of protoplasm, containing many nuclei. This is known as the myeloid or giant cell." This is an astonishingly easy way, surely, to get over a mooted pathological point, and its simplicity would have brought blushes to the cheeks of Klebs, Köster, Hering, Treves, Lancereaux, and others who have battled so vigorously to sustain their theories concerning the origin and mode of formation of these bodies. Possibly this is one of the

"departures from the ordinary." At the same time the reviewer is aware that the theory is supported by one able observer.

Again, in speaking of the "exudate" in the gray hepatization of croupous pneumonia, the author says: "The epithelial cells of the alveolar walls, which up to this time displayed only a cloudy swelling, now take on active proliferation, and add their progeny to the swelling multitude of embryonic cells which now crowd the alveolar spaces. A rapid degeneration now ensues." There does not seem to be very much doubt that it has begun. At all events, there are so many of the "fundamentals" of pathology imbedded in the meshes of this single sentence that it can not sustain its own weight, and, consequently, degeneration or rupture is a forced condition. There is an immense amount of pathology wrapped up in this statement, but it does not seem to the reviewer that the "essentials" would have been injured by the association of less obfuscation and more perspicuity.

It must be inferred, as with reference to many other accidents, that there is some valid reason for publishing this book aside from that given by the author. Perhaps his students asked it as a special favor; but an old teacher should not have let the desire for fame blur the fact that boys are up to all sorts of pranks. However, the illustrations are not bad, because they originated with good authorities in pathology; the text is obscure in many places, but perhaps no more so than in other books written to illustrate the fact that the same idea can be expressed in different ways; the paper and printing are good.

A Text-Book of General Pathological Anatomy and Pathogenesis. By ERNST ZIEGLER, Professor of Pathological Anatomy in the University of Tübingen. Translated and Edited for English Students by DONALD MACALISTER, M. A., M. B., M. R. C. P., etc. New York: William Wood & Co., 1883. Pp. xv-371. [Wood's Library of Standard Medical Authors.]

This volume constitutes a valuable addition to those by which it has been preceded. Of course, it will not prove so interesting to the general practitioner as to those specially interested in pathology, but there is sufficient information in its pages that can be readily taken up by the medical man with average qualifications to make it a desirable addition to his library. The translator and editor has made many good additions, such as broaden the scope of the work as a book of reference, and besides bring it well up to the advanced ground which this department of medical science now occupies. Professor Ziegler is also engaged in writing the second part of this work—that on Special Pathological Anatomy—and it is to be hoped that the translator will give it his immediate attention as soon as its publication in German has been completed. Malformations, disturbances of nutrition, inflammation and inflammatory growths, tumors and parasites, are the subjects considered in this part, and it is fully illustrated. Professor Ziegler is a terse writer, and seems at times to be rather dogmatic, but yet not too much so, perhaps, to carry conviction to the mind of the student.

State Charities Aid Association. Hand-book for Hospitals. New York: G. P. Putnam's Sons, 1883. Pp. 263. [Price, \$1.]

OFFICIAL visitors to hospitals, and those interested in hospital management, will find this volume of great practical service. Without encroaching too much upon the province of the architect, clear and common sense directions are given as to hospital construction, ventilation, heating, plumbing, etc. We quote some of these as examples: "The approved plan [of hospital building] requires one-story wards, raised on piers or arches, that the air may circulate freely, the ground beneath being

coated with asphalt, or other smooth, dry surface. The wards are to be built of wood where the fire laws permit, or of brick with a 'damp course' of slate or asphaltum." "The hospital should never be built around a closed court. Whether it have one or more stories, the long axis of all its wards should run as nearly as possible from northeast to southwest." "The annex containing the water-closets and other service-rooms should be built at the north end of the ward but a little to one side, so as not to interrupt the air-currents." "It is a serious error to build wards opening directly into one another." "The ward windows should take up one third of the wall space. The windows should be on opposite sides, at least one window between every two beds in the medical wards, and one window for each bed in the surgical wards." But the book throughout is full of such almost epigrammatic sentences. Following the chapters upon construction we have directions as to the internal management, the laundry, the kitchen, and the nursing service. Then comes a chapter treating of village hospitals; and, finally, one full of practical detail as to the proper use of disinfectants. In the appendix a good list of authorities is given for reference. Whoever the author of the book may be, he is entitled to the highest praise for the admirable manner in which he has done his work.

Hospitals, Infirmaries, and Dispensaries: their Construction, Interior Arrangement, and Management. With descriptions of Existing Institutions and 74 Illustrations. By F. OPPERT, M. D., M. R. C. P. L. Second (English) edition, revised and enlarged. London: J. & A. Churchill, 1883. Pp. xviii-1 to 278, inclusive.

The most valuable portion of this book is the second part, which gives plans and descriptions of a number of the leading hospitals of the world. The first part treats of the construction of hospitals, both general and special, and is not so good as other works we have read. Ten American hospitals are briefly described, three of which are in New York city, viz.: Bellevue, the Roosevelt, and the German Hospitals. We can but express our surprise that the New York Hospital is left entirely out. A list of the literature of hospital construction is given.

Transactions of the College of Physicians of Philadelphia. Third Series, Volume the Sixth. Philadelphia, 1883. Pp. xliiv-451.

THE present volume presents an appearance uniform with that of the series by which it has been preceded, and contains the papers read before the college from December, 1881, to July, 1883, inclusive.

There are thirty-one contributions, some of which are illustrated, and the range of subjects makes the volume one of the most interesting that have been published. The reviewer has been especially interested in reading the papers by Da Costa, on Catarrhal Fever; Keating, on The Presence of Micrococcus in the Blood of Malignant Measles; Meigs, on Albuminuria; Roberts, on Heart-puncture and Heart-suture as Therapeutic Procedures; Wilson, on The Management of Enteric Fever; Hamilton, on Sewer Gas and its alleged Causation of Typhoid Fever; Leeds, of Hoboken, N. J., on Infant Foods; Catlin and Weir Mitchell, on The Relation of Pain to Weather; and Eskridge, on Abscess of the Brain. The paper on the question, "Does Excision of the Larynx tend to the Prolongation of Life?" by Dr. Cohen, is, from a statistical standpoint, one of the most complete and elaborate of the series. His conclusion is that excision of the larynx for carcinoma does not tend to the prolongation of life, and that the greatest good to the greatest number appears to be better secured by dependence on the palliative operation

of tracheotomy. It would be inviting to enter into a somewhat detailed consideration of each of these papers, but the limits of this review preclude us from the undertaking, and we must be content with the statement that the volume is worthy of careful perusal. Many of the papers and discussions have been given in this journal.

Lectures on Medical Nursing, delivered in the Royal Infirmary, Glasgow. By J. WALLACE ANDERSON, M. D., Lecturer on Medicine, Royal Infirmary Medical School, etc. Second edition. New York: Macmillan & Co., 1883. Pp. x-224. [Price, \$1.]

This is a pleasant series of lectures upon nursing, the subject being treated from its medical side alone. It is not a complete treatise, but what it contains is thoroughly useful and practical. One sentence in the book might well be posted as a motto in every nurse's room in place of the usual "Home, Sweet Home," and that is: "Of course, as individuals you must form opinions, but as nurses you are not to act upon them; it is the doctor's opinion you follow." The author instructs the nurses in the important symptoms which are to be observed, such as the temperature, the pulse, the respiration, and the variations in the discharges from the body. He gives a short description of digestion, and hints as to the proper cooking and administration of food. Directions as to the proper making and application of poultices, baths, etc., are clearly and concisely given. The appendix contains recipes for food for invalids, a table of poisons and their antidotes, a schedule of weights and measures, and a glossary of medical terms.

Practical Histology and Pathology. By HENEAGE GIBBES, M. D., Lecturer on Physiology and Histology in the Medical School of Westminster Hospital, etc. Second edition. Philadelphia: Presley Blakiston, Son & Co., 1883. Pp. viii-154. [Price, \$1.50.]

THIS small book contains a few methods by which various tissues of the body may be prepared for examination with the microscope. It does not aim to be exhaustive, but it is concise, practical, and comprehensive. It is evidently the writing of one who has employed the methods recommended, and at nearly every step can be recognized readily the hand of an expert manipulator. If the student will follow exactly the directions given in the pages of this little book, he will learn much that will be of great service to him in the use of the microscope. The part in practical pathology contains but little aside from methods of sealing up specimens and staining bacteria. Under the last head have been given a variety of methods of staining the bacillus tuberculosis. About the only objection that can be urged against the book is, that there is not enough of it.

BOOKS AND PAMPHLETS RECEIVED.

A Complete Hand-book of Treatment, arranged as an Alphabetical Index of Diseases, to Facilitate Reference, and containing nearly one thousand Formulæ. By William Aitken, M. D. (Edin.), F. R. S., Professor of Pathology in the Army Medical School, etc. New York: Bermingham & Co., 1882. Pp. 444. [Bermingham's Medical Library. Price, \$2.]

Index-Catalogue of the Library of the Surgeon-General's Office, United States Army. Authors and Subjects. Vol. IV—E—Fishes. Washington: Government Printing Office, 1883. Pp. [12]-1033.

Annual Report of the Board of Regents of the Smithsonian Institution, showing the Operations, Expenditures, and Condition of the Institution for the year 1881. Washington: Government Printing Office, 1883. Pp. xvi-839.

What to Do First in Accidents and Emergencies. A Manual explaining the Treatment of Surgical and other Injuries in the Absence of the Physician. By Charles W. Dulles, M. D., Fellow of the College of Physicians of Philadelphia, etc. Second Edition, Revised and Enlarged, with New Illustrations. Philadelphia: P. Blakiston, Son & Co., 1883. Pp. 119.

Outlines of Chemistry, for Agricultural Colleges, Public and Private Schools, and Individual Learners. By N. B. Webster, A. M., Norfolk, Va. New York: Clark & Maynard, 1883. Pp. 144. [Practical Science Series.]

A Compend of Surgery for Students and Physicians. By Orville Horwitz, B. S., M. D. With Fifty Illustrations. Philadelphia: P. Blakiston, Son & Co., 1883. Pp. 133. [Quiz Compend.]

The Classification, Training, and Education of the Feeble-minded, Imbecile, and Idiotic. By Charles H. Stanley Davis, M. D. New York: E. Steiger & Co., 1883. Pp. 46.

A Physician's Sermon to Young Men. By William Pratt, M. A., M. D., F. R. C. S., etc. New York: M. L. Holbrook & Co. Pp. 48. [Price, 25 cents.]

Consultation Chart of the Eye Symptoms and Eye Complications of General Diseases. By Henry G. Cornwell, M. D., Professor of Ophthalmology and Otology in Starling Medical College, Columbus, O. Second Edition. Cincinnati: Robert Clarke & Co. [Mounted on rollers. Price, 50 cents.]

A Clinical Study of the Action and Uses of Caffèine and Convallaria Maialis as Cardiac Tonics. By Beverley Robinson, M. D., Professor of Clinical Medicine at the Bellevue Hospital Medical College. [Reprinted from the "Therapeutic Gazette."]

Transactions of the Indiana State Medical Society, 1883, Thirty-third Annual Session, held in Indianapolis, May 8, 9, and 10, 1883. Pp. 393.

Memoir of Jonathan Letterman, M. D., Surgeon, United States Army, and Medical Director of the Army of the Potomac. By Brevet Lieutenant-Colonel Bennett A. Clements, Surgeon, United States Army. [Reprint from the "Journal of the Military Service Institution."]

Due Casi di Onichia Maligna ed Uno di Ragade Spasmodica dell' Ano Curati col Jodoformio. Pel Dottore Vittorio Cavignis. [Reprint from the "Gazzetta Medica Italiana-Lombardia."]

Seventy-sixth Annual Catalogue and Announcement of the College of Physicians and Surgeons, New York.

Correspondence.

LETTER FROM PHILADELPHIA.

The Health of the City.—The College of Physicians.—The Nurse Registration Bureau.—The County Medical Society and the Question of admitting Women to Membership.—Opening of the Winter Sessions at the Colleges.—The New Lunacy Law.—The Clinics at the Pennsylvania Hospital.—The Unrestricted Sale of a Poison.—Professor Goodell and the Carbolic-Acid Spray.

PHILADELPHIA, October 4, 1883.

THE remarkably pleasant weather of last summer has been followed by weather equally fine, though more seasonable, thus far in the autumn, and the favorable results upon the health and happiness of the community are evident not only in the decreased death-rate, but also in the abundant leisure of physicians. It is in vain that they consult Ephemerides—a practice which we have no doubt must be very reprehensible, since Dr. Rush mentioned it only to condemn. There is no epidemic, or prospect

of one; the few patients with typhoid that belong to this season of the year have had very few enteric symptoms, and, as the rule, have been more or less constipated throughout the disease; small-pox has nearly disappeared, and the other zymotic affections are similarly kept in abeyance; even consumptives are able to lead an out-door life and seek health from first sources. The doctors, therefore, having much unoccupied time on their hands, improve the occasion and attend the various medical societies which have started out with good prospects for an active winter's campaign.

The College of Physicians, which meets once a month, has within the past year shown greater activity than ever before, if the handsome annual volume of the "Transactions," which has just been issued, may be taken as any criterion. Having a membership now of over two hundred, the meetings are now well attended, new members are applying for admission, the papers and discussions are able and animated, and the library is growing at a rate which indicates the need of greater accommodations in the near future. Indeed, plans have already been drawn for building a third floor, and some steps have been taken toward obtaining the means. The Mütter Museum Committee has a large surplus in its hands, it is true, but, unfortunately, its funds can not be appropriated for this purpose without diverting them from the original object of the trust. There are signs of increasing sociability among the Fellows, and a committee has been appointed to make arrangements for receptions this winter, and possibly they may inaugurate an annual dinner.

The Nurse Registration Bureau established by the College of Physicians has been a great convenience both to physicians and to patients, and is becoming appreciated by the community. Although the fees are moderate, it has usually a surplus at the end of the year, which is given to the library of the college.

The County Medical Society, with about four hundred members, meets three times a month, and also issues a very creditable annual volume of proceedings. At its quarterly business meeting, held October 3d, the woman question was again put to the test of the ballot, but the female candidates once more failed to get the requisite two thirds of the votes. A large and exciting meeting was held, but no discussion of the merits of the question was indulged in; the right of women practitioners having been conceded by a standing resolution of the society, passed nearly two years ago, which declared women to be eligible for membership under precisely the same rules and regulations as govern the admission of men. The censors recommended three ladies for membership, against whom no professional or personal objections were made, but the highest on the list received only seventy votes out of one hundred and sixty-five. Although the misogynists carried their point again, the sentiments of justice and liberality are prevailing gradually in the ranks of the members, and the question bids fair to be a perennial one, until settled in accordance with the law and usage of the American Medical Association, to which this County Medical Society is subordinate and responsible.

The Pathological, Obstetrical, and other societies are keeping well up to their work, and give no signs of degeneracy.

On October 1st the regular winter sessions were opened at both the University of Pennsylvania and the Jefferson Medical College, the introductory to the one hundred and eighteenth course of lectures at the university being delivered by Professor Alfred Stillé, that to the fifty-ninth course at the Jefferson being given by Professor Theophilus Parvin. The class at the university is larger than last year, the Freshman class in the Medical Department being over one hundred against seventy last session; the students, thus far, at Jefferson are less numerous than last year, although, owing to the different system of lecturing, the class is later in getting together.

The new insanity law went into operation September 19th, by which a committee on lunacy of the Board of Public Charities was created, with jurisdiction or "supervision over all houses or places in which any person of unsound mind is detained" for treatment. All hospitals or houses for the reception of persons of unsound mind must apply for a license to this committee, to whom detailed reports of the condition of each new patient must be sent within twenty-four hours after admission. No restriction is permitted upon the communication of such persons with their correspondents or friends, except that they may not address the committee oftener than once a month. The committee has full power to discharge patients from such institutions, and to issue regulations for their control, to pay visits of inspection, and revoke licenses at their discretion. This committee is composed of Philip C. Garrett, Esq., Chairman, the Hon. Henry M. Hoyt, Thomas G. Morton, M. D., E. Coppee Mitchell, Esq., W. W. H. Davis, Esq., and A. J. Ourt, Secretary.

The managers of the Pennsylvania Hospital have recently done a very unwise act in placing a restriction upon clinical teaching at this celebrated institution by charging five dollars for registration and admission to the clinics. It is a step that reduces the class to about one tenth of its usual number; at present it is not more than thirty; clinical lecturing by such men as Agnew, Levis, Da Costa, Hutchinson, and the others, to such an audience is simply ridiculous. The medical staff is much exercised by the peremptory manner in which they have been set to work to earn money for the hospital; however, its wishes were not consulted in the matter. It seems like an unpleasant precedent to establish, but the possession of power has always the tendency to make men arbitrary.

A suicide of a defaulting treasurer of a building society, by swallowing Paris green, in this city a few days ago, again directs public attention to the reckless manner in which this arsenical preparation is sold and handled. Some forms of arsenic can not be purchased unless the druggist registers the name and address of the purchaser, and is satisfied that it is to be properly used; but Paris green can be bought by the pound at the country grocery store without any restriction.

It is said that Professor Goodell is about to give up the carbolic-acid spray; he has operated in several cases without it, and has had equally successful results as with it.

LETTER FROM ST. LOUIS.

The St. Louis Fair.—Sir William McCormack.—The Prevalence of Malarial Disease.—The Hodgen Club.—The St. Louis College for Practitioners.—Ethical Matters.

ST. LOUIS, October 5, 1883.

This is the gala week of the year in our city. The St. Louis fair has a national reputation, and during this week the hotels and boarding-houses, and all sorts of lodging places and restaurants, have been taxed to their utmost capacity in providing for the thousands of strangers who have thronged our streets to see the "procession of the veiled prophets" and to attend the fair. The weather has been unfavorable, and it will be remarkable if many do not suffer in health from exposure to wet and mud and the fatigue attendant upon the unusual excitement and exertion.

Sir William McCormack has been in the city for a few days, and some of the members of the St. Louis Medical Society gave him an informal banquet at the rooms of the Mercantile Club last Saturday evening. It was an impromptu affair, all the arrangements having been made after seven o'clock that evening. Everything passed off very pleasantly, and Sir William expressed himself as much pleased with his entertainment.

The summer here has been a remarkably cool one. In fact,

the "Stay-at-Home Club" and the "Can't-Get-Aways" rather flattered themselves that they had a more comfortable time than the travelers this year. In fact, the last two summers have been so comfortable that our daily papers have suggested the propriety of setting forth the claims of our city as a summer health resort. At present there is a general prevalence of malarial disease, even more than is usual here at this time of the year.

A few months ago a little company of physicians organized a new medical society. Several meetings have been held, and they have been pronounced completely successful by those who have attended them. It has been the aim of its members to cultivate the social rather than the intellectual element, and to have meetings monthly or bimonthly, at which there should be opportunity for conversation and social intercourse, with a supper more or less elaborate. It is proposed now to introduce a working element, and to have discussions, perhaps papers, at each meeting. It is the intention to give some special study to matters of hygiene. All of the members of the society were more or less intimate friends of the late Dr. John T. Hodgen, and, in honor of his memory, the name selected for the organization is "The Hodgen Club."

The St. Louis College for Practitioners has just issued the announcement for its second year. It is claimed by its officers that this was the first college in the United States organized expressly for medical practitioners. Some of the members of the faculty are men of real merit and ability, but it is generally thought that these excellent men are associated, to their disadvantage, with others who are more shrewd and less scrupulous. Considerable talk has been caused by the fact that in the announcement there is a list of honorary members of the "College Association" in which appear the names of the deans of both the prominent regular medical schools, the St. Louis and the Missouri Medical Colleges, their titles as deans being given in full. It is a shrewd plan on the part of the officers of the College for Practitioners to give the impression that it is indorsed by the faculties of these other institutions. Inasmuch as this is not the case, it is expected that the gentlemen will decline the honorary membership which has been conferred upon them. (It is said that in one case the election to honorary membership was accepted, and that in the other a letter declining the same was sent after the announcement of the College for Practitioners was out.)

Speaking of unprofessional advertising, I think the St. Louis Medical Society will have some cases of infringement of the code of ethics to take in hand at an early date. In the morning "Globe-Democrat," the leading daily paper, an advertisement occupying a third of a page has appeared, calling attention to a combination of coca and tobacco, under the name of coca-plug, stating that "coca is a great nerve tonic, and, when combined with tobacco, it counteracts the injurious effect of the nicotine upon the system, which facts are certified to by the highest medical authority." In this advertisement are included certificates from six prominent practitioners to the effect that the combination of tobacco and coca would be less injurious to the system than tobacco alone.

Certainly, if it was unprofessional for prominent New York physicians to give testimonials as to the value of Hunyadi János and Apollinaris waters, it is none the less so for St. Louis physicians to give certificates for publication in the daily papers as to the value of such a combination as that referred to.

The St. Louis Medical Society has advertised itself pretty thoroughly to the country by its action in regard to the resolution offered by Dr. Pollak at the meeting of the American Medical Association, and there is a good opportunity now to support the code of ethics in a practical manner by calling its members to account for such unprofessional certificates.

THE
NEW YORK MEDICAL JOURNAL,
A Weekly Review of Medicine.

Published by
D. APPLETON & Co.

Edited by
FRANK P. FOSTER, M. D.

NEW YORK, SATURDAY, OCT. 13, 1883.

THE HYDROCHLORIC ACID OF GASTRIC DIGESTION.

The presence of free hydrochloric acid in the stomach during the process of gastric digestion is well known, and its absence in certain morbid conditions has of late years been looked upon by some German writers as of great importance. In a recent number of the "Progrès médical" Dr. E. Voght gives an interesting *résumé* of the views put forth by these writers.

Dr. von den Velden has tested the contents of the stomach, withdrawn during digestion by means of a Kussmaul's pump, using various reagents for the detection of free hydrochloric acid. Of these different reagents, tropeoline was found to give the best results, being a yellow substance which turns red in the presence of a mineral acid, but in which the organic acids cause no change of color.

In the case of a patient with typhoid fever, von den Velden found that the acid was absent during the whole course of the disease, but that it reappeared during convalescence. In cases of simple dilatation of the stomach the acid was never found wanting, but in those of carcinoma its presence could never be detected. The absence of the acid can not be due to debility or a cachexia, it is argued, for it persists even after the patient is much improved, and those who are in the highest degree marasmic still preserve the acid, provided they are not cancerous. And no chemical action of cancer juice can be at the bottom of a lack of the acid, for all the eight cases observed were examples of non-ulcerated scirrhus. In one instance von den Velden founded a diagnosis of cancer on the absence of the acid, in spite of the lack of any other symptom; and the autopsy proved him to have been right. On the other hand, in a case where all the symptoms pointed to cancer he denied its existence on the strength of finding the acid, and in this case, too, he was proved to be correct. In a case of cancer of the liver, without involvement of the stomach, the acid was found to be present.

Further researches by von den Velden have shown that the saliva which reaches the stomach mingled with the food acts upon the starch only when there is no free hydrochloric acid present, so that, as the acid appears in an hour or an hour and a half after eating, we may distinguish two periods of gastric digestion—one in which the saliva continues to act, and the other in which peptones are formed in large amounts.

These conclusions have been criticised violently by Ewald, who maintains that the action of the reagent may be disturbed by the presence of albuminates, blood, etc.; that in many cases of carcinoma the hydrochloric acid reaction is preserved; and that the two periods of gastric digestion have no existence,

the diastatic action being only diminished, and not suppressed, when the gastric juice becomes acid. Von den Velden retorts that Ewald's chemicals (the tropeoline, etc.) were not pure, and that he did not attribute a specific action to carcinoma, but was simply seeking to ascertain in what particular cases the free acid was absent.

Dr. Edinger, having observed that the acid was absent in two cases of amyloid degeneration of the gastric mucous membrane, is disposed to attribute the fact to the existence of an endarteritis obliterans of the arterioles of the mucous membrane. Proceeding on an idea of Réaumur's, he has devised an ingenious and advantageous substitute for Kussmaul's pump. A little piece of sponge, inclosed in a gelatin capsule, is swallowed by the patient, a thread having been attached to it. At the end of half an hour the sponge is withdrawn. By this time the capsule has been dissolved, and it suffices to press out the juice contained in the sponge, and test it with tropeoline.

Dr. Uffelmann, who experimented on a person with a gastric fistula, prefers methyl violet as a test for the free acid, and proposes a process based on the employment of the coloring matter of red wine. Edinger objects to this, however, and clings to the tropeoline. In nine febrile patients, Sassesky has observed that the acid disappeared when the fever was accompanied with indigestion.

It is evident that a wide and promising field for investigation has been opened by these experimenters, and it seems likely that the sponge and gelatin device may facilitate further research.

ARTIFICIAL IMPREGNATION.

We doubt if it will finally be recorded otherwise than as to the credit of the medical profession that the feeling of curiosity with which it has looked upon the experiments that have been made from time to time in artificial impregnation has always been associated with an under-current of disapproval. A pointed confirmation of our doubt is to be found in certain judicial proceedings that have lately taken place in France.

It seems that a Bordeaux physician, one Dr. de Lajartre, had advertised somewhat pompously in the newspapers that he was in possession of a peculiar and infallible means of overcoming sterility. In consequence, one Madame A. was induced to give his method a trial. The doctor performed an "operation" upon her, but not only did it fail to accomplish the object in view, but it gave rise to a pelvic disease, if Madame A.'s account is to be credited. For these reasons, the lady and her husband declined to pay the doctor's fee, 1,500 francs. To account for his failure, and at the same time to strengthen his title to the fee, the doctor maintained that conception had really taken place, but that the lady herself willfully took measures to produce an abortion.

The matter became a public scandal, and was at last brought into court, de Lajartre having sued for his fee, and the husband and wife setting up a counter-claim for damages, founded partly on the derangement of health alleged to have been caused by the doctor's procedures, and partly on the detriment to the reputation of the pair due to his having bruited the facts about.

These circumstances were brought out in the trial of the case. De Lajartre not only lost his suit, but was compelled to pay all the costs. The judge's decision was coupled with a rebuke of the doctor's ways, and with a decided expression of opinion that such experiments as he had made use of ought not, in the interest of public morals, to be shifted from the domain of science to that of every-day life.

The justice of the decision is scarcely less evident than the propriety of the remarks with which its delivery was accompanied. This, we take it, will be conceded by the great majority of our readers, but the interesting question arises as to M. de Lajartre's status in the French profession. If his conduct is not quackery of the vilest sort, we fail to comprehend the meaning of the term; and, if his career is allowed to continue, we shall eventually begin to doubt the efficiency of the laws governing medical practice in France, and to question if "Lyon médical" might not profitably devote to the consideration of such matters a modicum of the space it lately allowed one of its correspondents, a M. Poncet, in which to enlarge upon his discovery that Americans do not eat, but simply stuff themselves.

THE ILLINOIS STATE BOARD OF HEALTH.

By the board's latest publication, entitled "Medical Education and the Regulation of the Practice of Medicine in the United States and Canada," we learn with much satisfaction that there are no signs of its receding from the stand it has taken in the matter of the "good standing" of medical colleges. A list is given of twenty-four institutions which the board declines to recognize, and it is stated that there are several others concerning the status of which the board has not yet been called upon to decide. It is suggested, however—and herein lies the specific pledge that the board will not recede from its position—that the standing of any medical college may be readily determined, for the purposes of the Illinois Medical Practice Act, by comparing its curriculum of study and requirements with the schedule set forth by the board some time ago, which schedule is now published again; and the hint is given that students intending to practice in Illinois will do well to make the comparison for themselves if they wish to avoid an examination by the board.

It is further stated that the Illinois requirements have been adopted by the Missouri State Board of Health, and that they will soon be adopted by the Minnesota State Board of Medical Examiners. There are several other States, notably that of West Virginia, in which tantamount requirements are in force, and it is continually growing more and more intolerable that the older and more populous States of the east can not be shamed into a like policy.

THE AMERICAN ACADEMY OF MEDICINE.

ELSEWHERE in this number of the journal will be found an abstract of the proceedings of the Academy at its eighth annual meeting, held in New York on Tuesday and Wednesday of this week. It will be seen that several well-known members of the profession were in attendance, and that some of the papers read

were of more than ordinary importance. The meeting must be classed as one of the most successful in the short history of the Academy, not only for these reasons, but because among the gentlemen newly admitted to membership there were some who will undoubtedly add an element of positive strength to the organization.

The particular aim of the Academy, as many of our readers are doubtless aware, is to raise the standard of medical education in this country, and thus far the most noticeable feature in its plan for attaining that end has been to restrict its membership to those who have an academic degree. In so doing, the Academy concentrates its energies on the single point of preliminary education. By reason of that fixity of purpose, it ought to be able to accomplish something tangible before many more years have passed. It seems to us that there are two ways in which the Academy might have set about its work: one by dwelling on the advantages of the sort of preliminary education it favors, and the other by devoting itself to the task of bringing out a class of papers and discussions that should, by their manifest superiority to ordinary society work, demonstrate the strength of its doctrine without directly alluding to it. It has chosen the former course. Whether it would not, even now, be the part of wisdom for it to shift to the latter is a question that, it seems to us, may fairly arise in view of the slight impression it has thus far made upon the profession.

MINOR PARAGRAPHS.

THE HEMERALOPIA OF THE TROPICS.

UNDER the term "essential hemeralopia," M. Fontan has described, in the "Recueil d'ophtalmologie," a visual trouble, characterized mainly by nocturnal amblyopia, which has generally been considered as independent of any permanent and definite disease of the fundus of the eye. He excludes from consideration the hemeralopia which is symptomatic of retinitis pigmentosa, and also that which sometimes appears in certain forms of papillary atrophy and chronic choroiditis. This nocturnal amblyopia is met with as an epidemic in groups of cases or in isolated cases in tropical countries. As regards its ætiology, he thinks that sudden alterations in the degree of illumination are more likely to act as an exciting cause than a continuous bright light. Any debilitating influence and certain general morbid diseases—such as paludism and melanæmia—act as predisposing causes. There is no intimate connection between scurvy and this affection. The paludal influence is met with at every step in nautical or tropical hemeralopia.

The form of hemeralopia in question is accompanied by an habitual dilatation of the pupil, a diminution of the range of accommodation, sometimes a concentric limitation of the visual field, dyschromatopsia, and certain ophthalmoscopic lesions which are almost constant. The paresis of accommodation is analogous to senile presbyopia, but its cause is not to be sought for in loss of elasticity of the lens, but in weakness of the ciliary muscle. The limitation of the visual field is by no means constant. Among the ophthalmoscopic lesions, the most marked is the white, anæmic aspect of the papilla and its immediate surroundings. The veins are large, engorged, and of a violet or chocolate color. The arteries are filiform, and often invisible. The circum-papillary serous effusion appears like a thin, pale-rose or whitish cloud, semi-transparent, and of ill-defined limits, which rarely surrounds the papilla entirely. These changes all

disappear toward the ora serrata. In the treatment of these cases, Fontan relies on the sulphate of eserine.

DYSENTERY IN BUFFALO.

An editorial writer in the "Medicinisch-chirurgisches Correspondenz-Blatt," a monthly journal published in Buffalo, states that dysentery is endemic in East Buffalo, where there is no systematic drainage. Out of about fifty cases, the writer has had no death is an adult or in children past the tender age. He admits that the disease may be unusually mild, but avers that every case has been typical. The treatment he has employed is as follows: At first a powder is given containing from twelve to fourteen grains of calomel, half a grain of resin of podophyllum, a tenth of a grain of morphine, and four grains of sugar. After four or five evacuations have been produced, the patient is to take, every three hours, a pill containing a sixth of a grain of opium, two grains of salicylic acid, a quarter of a grain of acetate of lead, and a grain of powdered ipecac—taking twelve pills in all. If this does not succeed, both the powder and the pills are repeated. The statement is made that no other measures were found to be of service.

THE AMERICAN CLIMATOLOGICAL ASSOCIATION.

We lately mentioned a movement for the organization of a society for the study of climatology in its relations to medicine. We now learn that, at a meeting held on the 25th of September, an association was formed under the name that heads this article, and that it was determined that its objects should be the study of diseases of the respiratory organs, together with the influence of climate thereon. The following-named gentlemen were elected officers: Dr. Alfred L. Loomis, of New York, President; Dr. Frederick I. Knight, of Boston, First Vice-President; Dr. W. H. Geddings, of Aiken, S. C., Second Vice-President; and Dr. James B. Walker, of Philadelphia, Secretary and Treasurer. We are informed that it is intended to hold the first annual meeting in Washington at about the time of the meeting of the American Medical Association. Forty gentlemen in different parts of the country are said to have accepted membership.

COPPER AS A PREVENTIVE OF CHOLERA.

It seems that M. Burq was mistaken when he lately supported his theory of the preventive action of copper against cholera by citing certain alleged observations by M. Vulpian in India and China, to the effect that the army officers serving in those countries found the metal an effectual protection. M. Vulpian states that he had never even heard of its being resorted to for that purpose until he read an article in a secular paper crediting him with the experience alluded to. He regards the notion as chimerical, but sees no objection to a cautious use of copper for the purpose of settling the question.

NEWS ITEMS.

INFECTIOUS DISEASES IN NEW YORK.—We are indebted to the Sanitary Bureau of the Health Department for the following statement of cases and deaths reported during the two weeks ending October 9, 1883:

DISEASES.	Week ending Oct. 2.		Week ending Oct. 9.	
	Cases.	Deaths.	Cases.	Deaths.
Typhoid fever.....	86	11	74	25
Scarlet fever.....	26	8	42	2
Cerebro-spinal meningitis....	2	3	8	6
Measles.....	11	4	10	5
Diphtheria.....	41	16	29	14

YELLOW FEVER.—During the week news has been received of terrible ravages by the disease in various parts of Mexico, and refugees are arriving in New Mexico. All danger to San Francisco from the steamship that lately arrived there with yellow-fever patients on board is thought to have ceased, and most of the passengers have been allowed to land. Several doubtful cases are reported from Brewton, Ala., where two deaths have occurred, but the opinion prevails among the physicians of the locality that the affection is hæmorrhagic malarial fever, and the President of the Pensacola Board of Health assures the Surgeon-General of the Marine-Hospital Service that there is no yellow fever at Brewton. Several cases supposed to be yellow fever have appeared at Torre Annunziata, near Naples.

ST. BARTHOLOMEW'S HOSPITAL, LONDON.—Dr. Norman Moore has been elected an assistant physician.

CHOLERA IN IRELAND.—A correspondent of the "Lancet" reports what he considers to be genuine cases of Asiatic cholera as having recently been observed at Sligo.

AN ATTACK ON A PHYSICIAN.—M. Rochard, medical inspector-general in the French navy, was recently shot in the chest by an unknown assailant while returning to his house in Paris from a call at the department. At last accounts, he was reported to be doing well.

DISEASES OF DOMESTIC ANIMALS.—Infectious pleuro-pneumonia is reported to have broken out among the cattle of Lehigh County, Pa.

DIPHTHERIA IN AN INFANT ASYLUM.—Several cases of diphtheria having lately occurred in the country branch of the New York Infant Asylum, at Mount Vernon, the East Chester Board of Health proposes to investigate the sanitary condition of the premises.

INSANITARY SCHOOL-HOUSES.—A complaint having been made of the unwholesome condition of grammar school No. 69, in West Fifty-fourth Street, an official of the Board of Health has reported that the drainage is radically defective, both in the traps and in the air-inlets. The proper recommendations have been made. Like defects of plumbing have been found in grammar school No. 32, in West Thirty-fifth Street.

THE GARFIELD MEMORIAL HOSPITAL.—It is announced that work was actually begun on the buildings last week.

"FORT MIT DEM ESSLÖFFEL" is the cry of a writer in the "Deutsche Medizinische Zeitung" pleading for the use of the metric system.

THE "MEDICAL WORLD" is the title of a new weekly journal published in Philadelphia. It is edited by C. F. Taylor, M. D. The first number, dated September 27, 1883, is accompanied by a lithographic portrait of Professor Austin Flint, Sr., in the form of a supplement.

THE SISTERS' HOSPITAL, BUFFALO.—Dr. W. S. Tremaine, of the army, professor of surgery in the Medical Department of the University of Niagara, has been appointed surgeon to the hospital, and will hold two clinics each week.

OBITUARY NOTES.

SURGEON-GENERAL CRANE, OF THE ARMY.—A brief dispatch from Washington, received on Wednesday, conveyed the sad information that the Surgeon-General died in Washington on the morning of that day. Subsequent dispatches to the

newspapers state that his death was from hæmorrhage at the base of the tongue, supposed to have been due to rupture of the lingual artery.

Brigadier-General Charles H. Crane was fifty-eight years of age at the time of his death. He was a native of Rhode Island, but was appointed to the medical corps of the army from Massachusetts, entering as an assistant-surgeon February 14, 1848. He attained to the rank of captain February 14, 1853, became major and surgeon May 21, 1861, brevet lieutenant-colonel and brevet colonel January 1, 1865, brevet brigadier-general (for faithful and meritorious service during the war) March 13, 1865, and colonel and assistant surgeon-general July 28, 1866. On the retirement of the late Surgeon-General Barnes, Dr. Crane became surgeon-general, with the rank of brigadier-general. Brief as Surgeon-General Crane's actual incumbency of the office has been, it has sufficed to stamp his character as a man of rare executive talent, and to deepen the attachment felt to him personally by his colleagues of the medical corps. During many months preceding General Barnes's retirement, indeed, Dr. Crane was practically the chief medical officer of the army, and in that trying capacity, as well as during the period for which he bore the title, he was honored and esteemed by those who were brought in contact with him, whether officially or socially. The sense of loss felt by the medical corps of the army will be shared by the profession at large.

PROFESSOR BAUM, OF GÖTTINGEN.—Dr. Wilhelm Baum, formerly professor of surgery at Göttingen, died recently at the age of eighty-four.

Letters to the Editor.

THE PROPOSED AMENDMENTS TO THE CONSTITUTION AND BY-LAWS OF THE ACADEMY OF MEDICINE.

To the Editor of the New York Medical Journal:

SIR: The postal-card recently issued to the members of the New York Academy of Medicine by the "Council of the Organization for upholding the National Code of Medical Ethics," etc., deserves a little careful examination. It contains statements that appear to me to be hardly justified by the facts. It says: "The proposed amendments, were they adopted, would eliminate from the constitution and by-laws everything relating to ethics, and surrender the Academy to those who advocate the abolition of all ethical codes." This is a mistake, as the amendments contain a provision by means of which the council of the Academy can inquire into any alleged misconduct on the part of its Fellows. Ethical improprieties may thus at any time be made the occasion for discipline in the same manner as other offenses. "The Academy would thereby be deprived of the right of representation in the American Medical Association, and of affiliation with other medical organizations out of the State of New York." The first part of this is correct; but, inasmuch as the Academy is not in affiliation with "other organizations out of the State," I fail to see the pertinence of the allusion. "The code has never been made a subject of discussion in the Academy." It is perfectly correct to say that the American code has never been discussed on its merits in the Academy. Those opposed to this code have heretofore carefully avoided the introduction of any measure calculated to interfere in any way with the scientific prosperity of that body. The old-code party have also refrained from discussing the merits of that instrument, probably because they were aware that the result of such a discussion would be adverse to their views.

The postal-card states that "the resolutions presented and adopted at the last" [spring] "meeting of the Academy bad for their object the prevention of any future discussion relating to the code." I fail to see how the resolutions of last spring were expected to accomplish that end. Their sole effect was to influence the future membership of the Academy, so as to render it impossible for any except those in accord with the then majority to become members. No matter how eminent a man's scientific attainments, the Committee on Admissions would not be able to report favorably on his candidature. The resolutions in question could not, of course, prevent any of the existing members of the Academy from bringing up a discussion of the code. The only way to prevent that would be for the council of the Academy to copy the example of the council of the American Medical Association, and exclude from the meetings all members except those who are in favor of the Academy's present code, and who would agree not to change their minds on the subject. The natural effect of the "resolutions" would be to excite a spirit of retaliation, and those opposed to them would have little difficulty in preventing the admission to fellowship of all who were supporters of the old code. How long the Academy would continue to flourish and prosper while such a state of affairs lasted may be readily estimated. I believe that last year the expenses of the Academy exceeded its income. If for several years to come additions to the fellowship were prevented by either or both parties, the remaining Fellows, in gradually decreasing numbers, would be obliged to pay increasing assessments in order to maintain the institution on its present footing. This the writer, and perhaps others, would regard as paying a pretty high price for the privilege of representation in the American Medical Association. The Academy is undoubtedly in an unfortunate position at the present time, and the practical question appears to be whether it is more desirable to sacrifice the American Medical Association or to sacrifice the Academy. Those who care more for the former than for the latter will oppose the passage of Dr. Barker's amendments, while those who believe that the interests of the profession of this city will be best subserved by harmony and prosperity in the Academy will support the amendments.

ACADEMICIAN.

NEW YORK, October 8, 1883.

Proceedings of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

A STATED meeting was held September 26, 1883, Dr. G. F. SHRADY, President, in the chair.

ABDOMINAL ANEURYSM.—Dr. ELLIOT presented the specimen, which had been removed from a man, thirty-seven years of age, first seen by him at the New York Hospital in July last. Eighteen months previously he began to suffer from pain in the lumbar region, also extending in the direction of the ureter to the testicle, and along the sciatic nerve. There was a history of alcoholism, but not of syphilis. No symptom of visceral disease could be discovered. The patient suddenly died, and, on post-mortem examination, rupture of a sacculated aneurysm of the abdominal aorta, and pressing upon the tenth, eleventh, and twelfth dorsal vertebrae, was found to have taken place. The vertebrae were considerably eroded. The size of the aneurysm was about that of a hen's egg. The arterial walls immediately above and below the aneurysm, and elsewhere, and the different viscera, were healthy. Death took place about an hour after the rupture.

Dr. VAN GIESSEN had once ventured a diagnosis of abdominal aneurysm by exclusion in a case in which no other symptoms could be obtained except those present in Dr. Elliot's case, the man being in other respects in perfect health, and the final result proved the diagnosis to be correct.

A PHTHISICAL LUNG, THE SEAT OF PERFORATION.—Dr. HEINEMAN presented a specimen from the body of a patient who had died of acute phthisis of two months' duration. At the post-mortem examination the diaphragm was found greatly depressed by air which had entered through a perforation in the lower portion of the right lung. A valve-like action seemed to have allowed of the entrance, but not of the return, of the inspired air through the opening. The abdominal viscera immediately assumed their normal position after puncture of the diaphragm with escape of the confined air.

SPLENIC INFARCTION FOLLOWED BY ABSCESS.—Dr. HEINEMAN also presented a specimen from the body of a patient twenty-one years of age, who entered Mt. Sinai Hospital last spring, suffering from occasional chilly sensations followed by irregular febrile movement. There were swelling and tenderness in the left hypochondrium. The patient progressively emaciated, and pus and a certain amount of blood were passed with the urine. The diagnosis of perinephritic abscess was made, and recently an exploratory incision removed about three pints of bloody pus. The patient's general condition was very low; he gradually sank, and died two days after the operation. At the post-mortem examination, infarctions of the spleen were found, and in its substance a large abscess. The kidneys were the seat of chronic nephritis, which had been one source of error in diagnosis. Valvular lesions were made out during life, and verified after death. With regard to treatment, Dr. Heineman said we were as much justified in cutting down upon an abscess of the spleen as of the liver. He agreed with Dr. Van Giessen, who said that he would not regard pus in the urine as of much diagnostic value in perinephritic abscess. Splenic abscess seemed to be of rare occurrence; in a conversation with Dr. Delafield, the latter had stated that he had seen but three or four cases. The termination had been by perforation, with emptying of the abscess contents into the peritoneal cavity, giving rise to peritonitis.

Dr. J. LEWIS SMITH had once seen a case of perinephritic abscess in a child, in which for a time albumin existed in the urine. A fistulous connection took place between the abscess and the intestine. A cure was effected by operative interference and the use of a carbolic wash.

CARCINOMA OF THE STOMACH AND LIVER.—Dr. FERGUSON presented a specimen from the body of a woman aged sixty. The symptoms of carcinomatous disease existed about eighteen months, giving rise to pain and vomiting. Just before death blood was vomited, and also passed from the rectum. She died in collapse. Extensive cancerous degeneration of the liver and of the stomach was found, and death had arisen from the opening of a large artery at the oesophageal end of the stomach. The nodules were found composed largely of small-round and cuboid cells. There were also a few nodules in the kidneys.

UMBILICAL PHLEBITIS.—Dr. J. LEWIS SMITH presented a specimen from the body of a male child eight months old. Dr. Smith saw the patient only occasionally. At birth the child appeared to be well developed, but within a few days showed febrile movement, and afterward multiple abscesses developed in the scalp and other portions of the body, apparently due to a septicæmic process. At about the second month a swelling appeared near the umbilicus, which was opened by the house physician, and bile was discharged. This opening healed, and afterward, up to the time of death, bile was discharged from the umbilicus. Inflammation of the left testicle at one time

existed, but was recovered from. At the post-mortem examination an abscess about as large as a walnut was found in the liver, communicating with the umbilical vein, through which the discharge of bile had taken place. The vein showed signs of inflammation. The gall-bladder and ducts were normal. One of the abscesses over the occipital bone had involved the bone and the dura mater beneath. Such cases were very rare.

With regard to multiple abscess due to septic poisoning, Dr. FERGUSON mentioned a case in which they seemed to have had their origin in vaccination performed three months previously, and continued eighteen months, when death took place after a fall causing dislocation and pressure of the odontoid process upon the medulla. Abscesses were also found in the brain, and contained numerous bacilli of tuberculosis.

AMERICAN ACADEMY OF MEDICINE.

THE eighth annual meeting was held in the parlors of the New York Academy of Medicine, Tuesday and Wednesday, October 9 and 10, 1883, the President, Dr. HENRY O. MARCY, of Boston, in the chair.

First Day—Afternoon Session.

The meeting was opened with a prayer by Dr. TRAILL GREEN, of Easton, Pa.

THE LATE DR. GEORGE M. BEARD.—Dr. A. D. ROCKWELL, of New York, read a graceful and interesting sketch of the life of the late Dr. Beard.

THE VALUE OF AN ACQUAINTANCE WITH BOTANY AS A PRELIMINARY TO THE STUDY OF MEDICINE.—Dr. BENJAMIN LEE, of Philadelphia, read a paper with this title, in which he deplored the present low requirements for the admission of students to medical colleges, and the omission of accessory studies from the college curricula, especially that of botany. He gave an account of the labors of the early professors in the Medical Department of the University of Pennsylvania in this field of teaching, and spoke of the capability of botanical study to enrich our materia medica. Reference was then made to the bibliography of botany in the United States, especially the works of Barton, Bigelow, and Carson. Some of the medicinal plants indigenous to America were described for the first time, he said, in a work by Hughes, published so early as the sixteenth century, "at the Green Dragon, outside Temple Bar," London. Of late years the development of our native vegetable materia medica had been left almost entirely to the efforts of the manufacturing pharmacists. An excellent opportunity for the study of the flora was offered the practitioner in the rural districts. Dr. Lee sought to impress upon the Academy the necessity of insisting upon the study of botany as one of the requirements for the admission of students to our medical colleges. If it were not studied before the medical course was entered upon, its pursuit would not be likely to be taken up afterward. Steps were now being taken by the Medical Society of the State of Pennsylvania to make an examination in botany a condition for admission as a medical student in that State.

THE IMPERFECTION OF TECHNICAL STUDIES AS A MEANS OF MENTAL CULTURE.—Dr. TRAILL GREEN read a paper in which he remarked that certain eminent persons, mentioning President Elliot, Mr. Charles Francis Adams, Jr., and others, had been widely reported as holding that a classical education was unnecessary in the practical pursuits of life and in the practice of medicine. Extensive quotations were made from the writings of these gentlemen, however, going to show that their views were quite the contrary. Mr. Adams had stated in an address that a knowledge of English and Latin should always be required of a person entering on a course of professional

study, together with that of a third language, ancient or modern, at the option of the student. In his introductory address at the opening of the present course of the Medical Department of the University of the City of New York, Dr. Knapp, professor of ophthalmology, had laid stress on the importance of a broad, general, and classical education before beginning the study of medicine. The paper was an earnest appeal for higher general education in the medical profession.

IS IT FAIR? A STUDY OF THE COMPARATIVE POLITICAL POSITION OF THE MEDICAL PROFESSION OF THE UNITED STATES.—In a paper with this title, Dr. CHARLES MCINTIRE, Jr., of Easton, Pa., compared the requirements for the practice of law and of medicine in different localities, together with the influence of members of the two professions with the community and politically, showing that the influence of the two was in proportion to their general culture.

HIGHER MEDICAL EDUCATION.—Dr. ALBERT L. GIHON, of the navy, read a paper on this topic. To show the need of a higher education in general on the part of American physicians, he gave amusing examples of the inability of some of them to spell words in common use. For instance, one gentleman, writing for information with regard to admission into the medical corps of the navy, signed his letter "respectively yours," and addressed it "to —, of the Navel Medicine Bord." The Army Medical Board, the State Board of Health of West Virginia, and other examining boards had met with many instances of a like nature, and, of course, also with examples of great lack of knowledge pertaining to the special calling of medicine. Of all the applicants for admission to the medical corps of the navy during the last twenty years, only thirty-two per cent. had been found acceptable. Dr. Gihon showed the necessity of the study of Latin and Greek, surgical anatomy, chemistry, botany, and other branches, a knowledge of which was not generally made a condition for granting the degree of doctor in medicine; the need of a four years' course in medical colleges; of power on the part of the colleges to grant the degree of bachelor under certain restrictions to graduates of three years' standing; and of the establishment of disinterested boards of examiners for degrees. He made some interesting points founded on the data given in the Students' Number of the "New York Medical Journal," and referred to the "gag-rule" enforced by the American Medical Association at its recent meeting, giving it as his belief that the distinction between the regular and the irregular practitioner should be based upon actual qualification, rather than on zeal in denouncing the sects.

Evening Session.

THE RECENT ADVANCES OF SANITARY SCIENCE; THE RELATIONS OF MICRO-ORGANISMS TO DISEASE.—This was the title of the annual address by the President, Dr. HENRY O. MARCY, of Boston. The address was an able exposition of the germ theory of the development of disease, and of the importance of sanitation based upon our present knowledge of the part possibly played by minute organisms in health and in disease. It was illustrated with micro-photographs projected on a screen.

Second Day.

ELECTION OF OFFICERS.—The following-named gentlemen were elected officers for the ensuing year: President, Dr. BENJAMIN LEE, of Philadelphia; Vice-Presidents, Dr. ALBERT L. GIHON, of the Navy, Dr. NATHAN ALLEN, of Lowell, Mass., Dr. GEORGE F. SHRADY and Dr. EDWARD J. BEEMINGHAM, of New York; Secretary and Treasurer, Dr. RICHARD J. DUNGLISON, of Philadelphia; Assistant Secretary, Dr. CHARLES MCINTIRE, Jr., of Easton, Pa.

It was voted to hold the next meeting in Baltimore.

The discussion of the papers read at the first day's session was then taken up, and was opened by Dr. L. S. PILCHER, of Brooklyn, who deprecated the importance that had been attached to the study of the dead languages in the movement to make it a prerequisite to admission to a medical college. Had such a requirement been in force in former times, he said, the profession would have been deprived of Hunter, Cooper, Paré, Velpéau, and Sydenham. The speaker then introduced a paper.

THE RELATIONS OF MEDICAL JOURNALISM TO HIGHER MEDICAL EDUCATION IN AMERICA was the title of Dr. Pilcher's paper, and in it he dwelt upon the influence of medical journals in elevating the standard of medical knowledge by giving expression to the scientific work of the profession.

Dr. STEINER thought Dr. Pilcher was out of order in expressing the sentiments he had expressed before a body whose avowed object was to elevate the character of the profession.

Dr. HUNT, of Boston, by invitation, joined in the discussion, and spoke of John Hunter's saying that an academic course would have made an old woman of him. Why did he say that? Simply because the college course was four years of play, chiefly with Latin and Greek, the smattering of which that was thus acquired being of no practical benefit whatever. It had been of no use to him (Dr. Hunt), and, judging from the papers he had listened to at this meeting, it had been of little use to the members of the Academy. What was wanted was original work in the special department concerned, viz., medicine.

Dr. GIHON remarked that Hunter and the other great men alluded to by Dr. Pilcher had gone through a course of training equivalent to a college course, and that was all the Academy contended for.

Dr. HUNT retorted that the Academy would not accept such an equivalent as a qualification for membership.

Dr. PILCHER closed the discussion with the remark that he thought the Academy could not afford to stifle the expression of views that might be at variance with those of some of the older members.

THE MILK SUPPLY IN LARGE CITIES.—Dr. J. CHESTON MORRIS, of Philadelphia, read a paper in which he referred specially to the milk supply of Philadelphia, and recommended a special method of transporting milk.

THE EXACT VALUE OF THE ELECTROLYTIC METHOD was the title of a paper read by Dr. A. D. ROCKWELL, of New York, in which he stated that the success of the treatment in malignant growths was trifling, although the size of the tumor was almost always reduced and the pain was decidedly relieved. Material relief was generally given in intramural fibrous tumors of the uterus when inaccessible to the knife. Electrolysis might be considered a specific for erectile and small cystic tumors, and, with proper care, a scar could be avoided. Relief was sometimes given in cases of goitre. Superfluous hairs could be permanently eradicated, and many cases of urethral stricture were much benefited. More experience was needed, however, to establish the exact value of the method in the latter affection.

A report was submitted by the COMMITTEE ON THE LAWS OF MEDICAL PRACTICE, Dr. DUNGLISON and Dr. MARCY.

THE IMPORTANCE OF CLEANLINESS IN SURGICAL OPERATIONS.—Dr. R. S. SUTTON, of Pittsburg, Pa., having sent a paper with this title, it was read by Dr. McIntire.

[Dr. Sutton read a paper on this subject at the recent meeting of the American Gynaecological Society, an abstract of which will be found in the journal for September 22d, p. 328.]

SOME THOUGHTS ON VACCINATION was the title of the concluding paper, by Dr. LEWIS P. BUSH, of Wilmington, Del. The author advocated compulsory vaccination, at least among the pupils in the public schools.

NEW YORK SOCIETY OF GERMAN PHYSICIANS.

A STATED meeting was held May 25, 1883, Dr. EMIL ROSENBERG in the chair.

TRACHEOTOMY.—Dr. H. J. BOLDT presented a little boy on whom he had performed tracheotomy in the early part of last January for membranous croup. He still wore the tube, because he could not breathe without it. Whether this was due to the presence of exuberant granulations near the wound, or to paralysis of the vocal cords, the doctor could not decide.

Dr. A. JACOBI said that if there was any difficulty in removing the tracheotomy-tube after the lapse of a reasonable space of time, it was commonly caused by exuberant granulations situated in the upper angle of the wound. For this reason he makes it a rule to always cauterize the wound with lunar caustic, beginning from the fifth day. In some rare instances the difficulty was with other changes in the larynx, with paralysis of the vocal cords, or with cicatricial contractions. In some cases he had succeeded in removing the cannula during sleep where it had not been practicable to do so while the child was awake, which proved that the trouble was only on account of the little patient's fears.

Dr. B. SCHARLAU remarked that the granulations were sometimes situated so high that they could not be seen at all. He remembered a case, of which he and Dr. H. F. Guleke had had charge some years ago, where the excrescences could only be reached by a probe, the end of which had been dipped in molten nitrate of silver. Where the presence of these growths was doubtful, it should be observed whether the dyspnoea arising from the removal of the tube increased or not after some time. If the first was the case, the presence of granulations could be assumed as certain. The increase of the difficulty of breathing was due to their increasing in size by venous congestion.

Dr. A. G. GERSTER mentioned a case of tracheotomy for diphtheria which he had seen together with Dr. George Degner. The tube had been removed a short time after the operation, and the wound had promptly healed. A few months afterward dyspnoea again set in, this time caused by granulations, and necessitating secondary tracheotomy. The case ultimately proved fatal. He said that polypoid growths occurred, not only at the upper angle of the wound, but sometimes also below it. He recalled a case where growths thus situated impaired respiration while the tube was still *in situ*, and had to be removed by cauterization.

Dr. A. JACOBI said that in the great majority of cases the polypi grew from the upper angle of the wound. This circumstance proved that it was not the pressure of the tube that caused them to sprout, but the diphtheritic process itself.

Dr. GERSTER called attention to the scars which occasionally were found to occupy the posterior wall of the trachea after the operation in question. This wall was apt to jut forward in the form of a fold. The fold, being subject to pressure by the tube became the seat of superficial necrosis, followed by the formation of a scar.

ABSENCE OF THE UTERUS.—Dr. R. TAUSZKY presented an Irish girl, twenty-four years old, who had consulted him for amenorrhœa. Upon examination, he found a scanty growth of hair upon the pubes, and above it two tumors of the size and consistence of testicles. The vagina was one inch and a half long, and did not lead to a uterus, nor could this organ be detected by the finger introduced into the rectum.

Dr. B. SCHARLAU, who examined the girl, also failed to find a womb. He thought that the two tumors above the pubes were hernial protrusions. What constituted the hernie could not be made out.

ABDOMINAL TUMOR.—Dr. R. TAUSZKY also presented a wo-

man, thirty-seven years of age, with a tumor of the abdomen, corresponding in size to the uterus in the sixth or seventh month of pregnancy. She had been married for four years, but never had any children. The swelling began a year ago. The menstruation was normal. The probe could be introduced into the uterus to the depth of four inches. Dr. Tauszky thought that it was either a subperitoneal fibroid of the womb, or an ovarian cyst. He had refrained from making an exploratory puncture on account of the danger of peritonitis, which was known to have followed tapping of ovarian cysts in some instances.

PERITONITIS FROM INTESTINAL PERFORATION.—Dr. A. SEIBERT showed a portion of the intestines of a young man, nineteen years old, who had died under the following circumstances: He had never been seriously sick before his fatal illness, and there was especially no history of typhoid fever. He had, however, been subject to constipation, often going five or six days without a movement of his bowels. His last sickness began by his being suddenly attacked by severe pain in the abdomen while at work. He then had not had a stool for five days. He was obliged to go home, where he was seen by Dr. L. Bopp, his family physician, who diagnosed perityphlitis. The next day collapse set in, and the patient died. Dr. Seibert made the autopsy. There was purulent peritonitis, but no tympanites. The vermiform appendix was missing, and a large ulcer occupied the place of its orifice. The ilco-cæcal valve was remarkably narrow. It showed no cicatricial hardness, however, and for this reason Dr. Seibert considered it to be a case of congenital stricture of the valve. It explained the constipated habit of the patient.

Dr. A. G. GERSTER drew attention to the fact that there was no dilatation of the intestinal tube above the seat of the stricture.

CONGENITAL MALFORMATION OF THE BRAIN.—Dr. E. C. SPITZKA presented the brain of the child from which other specimens illustrating congenital malformations had been shown to the society at the previous meeting by Dr. Boldt. The left hemisphere of the cerebrum was considerably larger than the right. The central fissure on the hypertrophied side was not well developed and could hardly be recognized. The island of Reil of the same side scarcely showed any convolutions, while the latter were well developed upon the corresponding part of the other hemisphere. The left cerebellar hemisphere was also larger than its fellow. Dr. Spitzka said that in cases of asymmetry of the cerebral and cerebellar hemispheres the asymmetry, as a rule, was found to be homonymous. The course of the fibers between the normal cerebrum and cerebellum being crossed, one would expect the opposite to be the rule. Dr. Spitzka also drew attention to a remarkable heterotypy of the medullary substance at the base of the left cerebellar hemisphere. There it displaced the cortical substance and protruded in the shape of a nodulated tumor.

ATHEROMA OF THE AORTA AND THE ARTERIES OF THE BRAIN.—Dr. H. J. BOLDT presented several specimens with the following history: Mrs. M. A., aged forty-four, married, very corpulent, had been suffering from occasional attacks of headache for years. On May 10, 1883, she was taken suddenly with a feeling of prostration. Two days afterward, early in the morning, she felt a burning pain in her face, with vertigo, nausea, and vomiting. She sat down on a chair. After fifteen minutes she attempted to rise, but found that she could not move. Dr. Boldt saw her at 9.10 A. M. There was left-sided hemiplegia and hemi-anæsthesia, also ptosis and paralysis of the facial nerve of the same side. The pupils were equal, and responsive to light. The tongue deviated to the right. The mental faculties were unimpaired. At 9.20 A. M. she vomited, and complained of chilliness. This was followed by a feeling of heat and formi-

eration in the extremities of the right side. The left half of her forehead was covered with perspiration. At 9.30 A. M. there was a voluntary discharge from the bladder. She began to have some difficulty in speaking, as well as in swallowing. Temperature in the rectum 99.4°, in the axilla 98.2. Pulse 84, full on the right side, weak and dierotic on the left. She complained of severe headache. At 9.50 A. M. she complained of chilliness in her right hand. Answered questions by monosyllables only. At 10 A. M. vomited again, and had another chill. At 11.45 A. M. she became unconscious. Her pupils were then contracted. The urine was voided by catheter, and was found to contain albumin. At 1.30 P. M. the pupils began to dilate. She died at 4.20 P. M. At the autopsy the vessels of the brain were found to be atheromatous, especially the vertebral arteries. There was an enormous hæmorrhage in the pons which extended into the fourth and into the left lateral ventricle. The heart was the seat of fatty degeneration. The aorta was atheromatous. There was also slight fatty degeneration of the pyramids of the kidneys.

CANCER OF THE LIVER, DUODENUM, LUNGS, AND VERTEBRÆ.—Dr. BOLDT also presented specimens of cancer of the liver, the duodenum, the lungs, and the vertebræ, with the following history: Mr. D. B., aged forty-nine. About thirty years ago he received a heavy blow with a piece of wood in the region of the lower cervical and the upper dorsal vertebræ. He fell unconscious, and remained so for several hours. He was unable to do any work for a month. Three years ago he suffered from violent pains in his right shoulder and in the region of the right side of the cervical and upper dorsal vertebræ, which prevented him from lying on this side. After lasting for six weeks, the pains subsided again. In the early part of December, 1882, he had an attack of diarrhœa which was accompanied by severe pain in the abdomen. Toward the end of the same month he was attacked by lancinating pains referred to the manubrium of the sternum and to the neighboring intercostal spaces. Two weeks later he complained of pains in the lower cervical vertebræ, radiating into the subscapular, median, and ulnar nerves of the right side. During the month of April these pains extended down as far as the third lumbar vertebra. On April 15th lancinating pains appeared in the left gastrocnemius muscle, and the left foot became œdematous. There was obstinate constipation. April 20th, complained of pain in the right leg and in the posterior portion of the plantar aspect of the left foot. May 3d, paralysis of right hand, with sensibility preserved. May 12th, vomited, without nausea. Strength failing rapidly. A nodulated tumor could be felt in the right hypochondriac region. The idea of an aneurysm was suggested by a double murmur, which was audible over the course of the abdominal aorta. Edema of the lungs supervened, and he died on May 15, 1883.

At the autopsy the liver was found to be enlarged and studded with nodules of carcinoma. The upper portion of the duodenum was degenerated into carcinoma. The lungs contained disseminate masses of this growth. The bodies of the first two dorsal vertebræ, as well as that of the last cervical vertebra, were also transformed into soft carcinomatous tissue, involving the corresponding portion of the spinal meninges. The sheaths of the nerve-trunks originating in that region were thickened.

Dr. Boldt thought that the primary seat of the pseudoplasm had been in the duodenum.

Dr. JACOBI thought that the history of the case pointed to the vertebræ as the starting point of the infection.

BLINDNESS FOLLOWING FACIAL ERYSIPELAS.—Dr. ERNST SCHOTTKY related a case of facial erysipelas followed by blindness. It was that of a man, forty years old, who had had ter-

tiary symptoms of syphilis already. The erysipelas began in the pharynx and the nasal cavity, and thence extended over the cheeks and the forehead. The lids became so much swollen that the eyes could not be opened for several days. The eyeballs were protruded. When the eyes could be opened at last, the sight of both was found to be entirely abolished. The pupils were contracted, but subsequently dilated again. Several deep incisions were made into the orbit, but no pus came, nor did they have the least effect upon the eyesight. He had remained completely blind ever since. During his illness he had also shown a peculiar idiosyncrasy against quinine, which drug produced urticaria.

Dr. H. KNAPP, who had also attended the patient, reported the result of the ophthalmoscopic examinations which he had made.

A. G. GERSTER, M. D., *Secretary.*

Reports on the Progress of Medicine.

OPHTHALMOLOGY.

By CHARLES STEDMAN BULL, M. D.,

LECTURER ON OPHTHALMOLOGY AND OTOTOLOGY IN THE BELLEVUE HOSPITAL MEDICAL COLLEGE; SURGEON TO THE NEW YORK EYE AND EAR INFIRMARY; OPHTHALMIC SURGEON TO ST. MARY'S FREE HOSPITAL FOR CHILDREN, AND TO THE NURSERY AND CHILD'S HOSPITAL.

THE ELONGATION AND STRETCHING OF THE NASAL NERVE.—Abadie (*"Annales d'oculistique,"* May-June, 1883) has an interesting article upon this subject. He cites the case of a lady, aged thirty-five, who ten years before had lost the right eye from some glaucomatous affection. An iridectomy had been done at that period, but the result had been unfavorable. The patient began to have similar symptoms in the left eye, and when Abadie saw her the glaucomatous condition was present. He performed a sclerotomy, but, after a week had elapsed, the pain and increase of tension returned. He then did an iridectomy, but in three weeks all the symptoms returned. He then determined to stretch the nasal nerve. An incision was made perpendicularly to the course of the nerve, extending from the pulley of the superior oblique to the tendon of the orbicular muscle. As soon as the nerve was uncovered it was seized by the forceps, and stretched so vigorously that it broke. The wound was then washed with a solution of boric acid, and a simple dressing applied. The next day all pain had ceased, and in three days the tension was normal, and vision began slowly to improve. Four months later, tension remained normal, and the vision was still improving. Since then Abadie has done this operation eight times, twice in combination with sclerotomy in cases of congenital hydrophthalmus, and with encouraging results. Care must be taken in making the incision in order to avoid cutting the nerve before it is laid bare. The results furnished by the stretching or laceration of the nasal nerve in glaucoma, if confirmed in the future, will furnish food for reflection upon the nature of this singular affection. An attentive study of the pathogenetic conditions in which it arises has always led Abadie to maintain that, of all the theories offered, that of irritation of the ciliary nerves, first advanced by Donders, was still the most satisfactory. Recently the incontestable success obtained by sclerotomy seems to favor the ideas of Wecker of the impermeability of the channels of filtration of the anterior segment of the eye. But this hypothesis of obliteration of the channels of filtration seems now to be in danger of being overthrown by the very recent researches with fluorescein, undertaken by Pfüger. The manner of penetration of this substance into the cornea shows that the channel of nutrition advances from before backward through the medium

of the circum-corneal blood-vessels. The stretching or laceration of the nasal nerve seems to be well adapted to various cases, and, like the operation of iridectomy, is capable of combating very different pathological conditions. Abadie prefers laceration of the nerve to simple stretching, for the following reason: The nasal nerve is very delicate, and hence if we desire to exert a traction which is efficacious, and which will really modify the nervous conductivity, a laceration is really necessary. He seizes the nerve with flat, smooth forceps, and draws it out; as it elongates, he seizes it with another pair of forceps, and thus he keeps on stretching it till it ruptures.

EXCESSIVE UNILATERAL STRABISMUS.—Abadie ("Archives d'ophtalmologie," May-June, 1883) describes his method of operating for the correction of excessive one-sided strabismus as follows: He makes a curved incision in the conjunctiva at the corneal margin, with the concavity toward the muscle, and sufficiently extended upward and downward to admit of arranging two conjunctival flaps, which he calls bulbar flaps, above and below the horizontal diameter of the cornea, and which serve for fixing the suture-points. As soon as this incision has been made, the lips of the conjunctival wound gape, and the flap on the side of the commissure, called commissural flap, recedes, and from this he cuts off a portion about two millimetres in thickness. In this manner the region of the sclerotic, upon which the tendinous graft is to be made, becomes uncovered, and the advancement of the muscle is only limited by the border of the cornea itself; whereas, if the conjunctiva were detached only at a certain distance from the corneal margin, the muscular graft might be interfered with by a portion of the ocular conjunctiva near the margin of the cornea. As soon as the sutures are in place, and the tendon of the muscles has been detached, the eye is ready for the advancement, and the eyeball is turned in and brought toward the muscle, to be advanced by seizing it with two pairs of forceps above and below the vertical diameter of the cornea, and turning the eye toward the commissure; it is then held in this position by an assistant until the sutures are introduced and tied in the ordinary way. After the sutures have been tied, there should be a little over-effect, to bring about a good result. The sutures should be allowed to remain for four or five days.

SYMPATHETIC INFLAMMATION OF THE EYE.—Ayres ("Arch. f. Augenheilk." xii, 4) has an interesting paper based upon three carefully observed cases. They are a direct contribution to the question of the transmission of sympathetic inflammation, and show that the incarceration of the optic and ciliary nerves excites sympathetic irritation and plastic iritis, and also that neuritis is connected with sympathetic serous iritis. The first case was one of enucleation of a stump after panophthalmitis, in which sympathetic inflammation broke out one year later, and was cured by excision of the optic nerve. The second case was sympathetic ophthalmia following an injury to the fellow-eye, which was cured by the prolonged and continuous employment of warm poultices and other means. The third case was sympathetic inflammation following a rupture of the sclera, which was also cured by the prolonged and continuous application of warm poultices. In this case, as soon as the media cleared up, an optic neuritis was plainly visible, and, as soon as this inflammation yielded to treatment, the vision improved, and was ultimately restored nearly to the normal standard. Plastic iritis and neuritis were in this case certainly connected together.

THE ELONGATION OF THE EXTERNAL NASAL NERVE.—Badal ("Annales d'oculistique," May-June, 1883) recurs to the subject of the treatment of ciliary neuralgia by elongation of the external nasal nerve, on which he had previously written. He thinks that the clinical facts hitherto observed are in favor of this method of treatment. The operation has succeeded in several

cases in which both sclerotomy and iridectomy have failed. His manner of performing the operation is as follows: After dividing the skin and muscular layer with a bistoury, he dissects away with two strabismus hooks the subjacent cellular tissue, and then, scraping along the periosteum from below upward with one of the hooks, he pulls out the vasculo-nervous bundle. The vessels are then separated from the nerve, in order to avoid any unnecessary hæmorrhage, and the nerve is then stretched as far as may be necessary.

THE VORTEX AND THE NUCLEAR ARCH OF THE HUMAN LENS.—Becker ("Arch. of Ophthalmology," xii, 2) has a very careful and interesting paper based upon the examinations of a one-cell entirely meridional section of a lens, with the adjoining layers, taken from the eye of a prematurely born infant, which died during birth. The lens was imbedded in an albumin-glycerin mass, and sections cut with Thoma's large microtome, which were hardly more than 0.01 mm. in thickness, through the entire lens. These sections furnished very accurate measurements of the dimensions of the lens. The transition from the anterior to the posterior surface being very obtuse, the form of the entire lens, in spite of the different curvature of the two surfaces, is more spherical than that of the adult. The capsule varies much in thickness, the average at the anterior pole being 0.008 mm., and at the periphery 0.01 mm. In the equatorial region, shortly before the epithelial cells are placed obliquely toward the capsules, the thickness of the capsule is diminished to 0.0059 mm., and opposite the vortex to 0.0047 mm. Farther back, at a point still within the insertion of the zonule, the capsule increases rapidly in thickness up to 0.024 mm. The dimensions of the epithelial cells and their insertion at the inner surface of the capsule change with the locality. In the region of the anterior pole they are short hexagonal columns, with a diameter of 0.01 mm. at the base. The almost spherical nucleus lies in the center of the cell. Toward the equator, where the capsule becomes thinner, the cells slightly increase in diameter, and the nucleus occupies the end toward the interior of the lens. The increase in length of the fibers at the vortex of the lens affects especially that part of the cells which lies nearest the capsule. The nuclei of the cells at the vortex do not differ in size from the nuclei of the anterior epithelium, but they are more elliptical in shape, and are placed vertically to the axis of the lens. Therefore, seen from the surface, the nuclei must appear smaller and nearer together, since the cells become at the same time smaller. As soon as the cells of the vortex begin to be elongated at their anterior end, the elongation takes place much more rapidly than the increase at the posterior end, so that the nucleus soon comes to lie in the center of the fiber. This more rapid increase at the anterior end continues for some time, until gradually the posterior end increases more, and the nuclei then take their place at about the anterior third of the fiber. This arrangement causes the nuclei of the nuclear zone to form at first an arch with the convexity backward, which later passes over into an arch with its convexity forward. For this double arch, in which the nuclei are arranged in a curved line which has been called nuclear zone, Becker proposes the name of nuclear arch. The nuclei at the vortex become more and more elliptical, and at the same time increase in size. At first they show a bright and uniform staining, but farther back the contents of the nuclei become separated into isolated granules, separated by a transparent substance. The vortex and nuclear arch of the human lens vary considerably according to age. The number of cells, which are elongated at the base only, decreases with age. The portion of the nuclear arch which is convex posteriorly contains fewer nuclei. In the same manner the number of those fibers which do not reach the radii of the star figure decreases with age, but they do not disappear entirely.

A CASE OF ECTOPIA OF THE EYEBALL CAUSED BY OSTEO-PHYTES OF THE ORBITAL ROOF, WITH CONSECUTIVE PNEUMATOSIS OF THE SUPRA-ORBITAL REGION.—Birnbacher ("Arch. f. Augenh.," xii, 4) reports a case of this nature in a young man, aged seventeen, who had suffered from hydrocephalus in infancy. When the patient was first seen, on April 12, 1881, the right eye protruded, but there was no limitation of motion, vision was normal, and the fundus was healthy. In the following September the upper orbital margin was found thickened. On February 10, 1882, while the patient was blowing his nose, there suddenly appeared a tumor under the right eyebrow, which during the night disappeared. This appearance can still be produced by an act of the same nature, and shows a smooth surface, distinct limitations, and is elastic. The percussion note over the tumor was tympanitic. On March 14th an exploratory incision with a Pravaz needle and syringe met with considerable resistance, and gave exit only to air, and the tumor immediately became very much smaller. On April 2d an incision was made parallel to and just below the margin of the eyebrow through skin and subcutaneous cellular tissue, from the external orbital angle nearly to the upper border of the lachrymal sac. The periosteum was then divided for the same length, and dissected up from the bone for a distance of 3 mm. in breadth. This opened into a cavity, which, besides air, contained two large partitions and one small partition of a reddish-gray, spongy bone, which jutted downward toward the eyeball. They arose from a fine, spongy mass of bone which formed the roof of the orbit. They extended 2 cm. deep into the orbit, and represented combs or ridges, over which the periosteum of the orbital roof was stretched, being in contact with bone only along their lower free margins. These combs or ridges thus projected into the cavity like stalactites. These three combs were removed with the chisel. Behind them the periosteum was found covered with small, hard, bony plates with sharp ridges, and these were also removed by the chisel, as were also numerous spongy, bony excrescences from the roof of the orbit. No actual inclosed frontal sinus could be found, nor could a probe be passed through the spongy bone of the orbit into the nasal cavities. After the cavity had been washed out, the eyeball could be replaced in the orbit. The incision in the periosteum was then united by carbolized catgut sutures, and a drainage-tube placed at its inner angle. The external wound was then closed by silk sutures as far as the drainage-tube, and the whole dressed with Lister's dressing. The patient made a good recovery.

INVESTIGATIONS INTO THE RAPIDITY OF RETINAL REACTIONS.—Charpentier ("Arch. de physiologie," May 15, 1883), in a lengthy article, proposes to elucidate the following points: 1. To determine the retardation of visual reactions in direct vision and in several eccentric directions of the visual field. 2. To exercise during a certain number of experiments the direct vision and a fixed eccentric point of the visual field. 3. To determine the influence of this exercise upon the duration of the reaction of the two points in question. 4. To determine in what degree the exercise of a definite point of the retina may influence other retinal points more or less distant, as well as the other unexercised eye. His experiments have led him to conclude that irritation of the eccentric parts of the retina in the normal state does not admit of as rapid reactions as in direct vision, but that exercise diminishes in great measure this inferiority. It is not difficult to believe that a very prolonged exercise would render all the regions of the retina almost equally perceptive, and that obstacles might eventually be avoided with the same rapidity by all parts of the visual field. We know that the influence of this habit or exercise is exerted in great part through the medium of an encephalic center, which unites the median part of one retina with the lateral part of the other, and which seems to be

modified in its entirety by the irritation of a limited point of one of the hemispheres of the retina which communicate with it.

A CASE OF PULSATING EXOPHTHALMUS; LIGATION OF THE LEFT COMMON CAROTID; DEATH.—Coggin ("Arch. of Ophthalmology," xii, 2) reports a case of this nature in a woman aged sixty-six. She first complained of noise in the left ear in February, 1882, which was supposed to be due to chronic catarrh of both middle ears, for which she was treated, but with no result. About the middle of April she complained of loss of sight in the left eye. There were slight convergence and some protrusion of the eye, incipient cataract, but no change in the fundus. On May 8th pulsation of eyeball was visible and recognized by palpation. The external rectus was paralyzed. Through the stethoscope, placed over the eye, a loud bruit was heard, which ceased on pressing the left common carotid, as did also the noise in the head. Some relief was gained by a pressure bandage over the eye, and tincture of veratrum viride in doses gradually increased to five minims every hour. Digital pressure on the carotid was not tolerated longer than seven minutes. On June 1st the left common carotid was ligated in the upper part; no bruit could afterward be detected with the stethoscope, and the eyeball receded somewhat. The patient died, hemiplegic on the right side, on the fifth day. At the autopsy the temporal parietal and occipital lobes of the left hemisphere of the brain were found softened and friable. The venous sinuses were normal. The ophthalmic vein was larger than usual. There was no aneurysm of the ophthalmic artery. On exposing the carotid artery in the course through the temporal and sphenoid bones, a marked aneurysmal dilatation of the cavernous portion was revealed, due to fatty degeneration.

THE PROPHYLAXIS OF PURULENT CONJUNCTIVITIS IN NEW-BORN INFANTS.—Crédé ("Archiv für Gynäkologie," xxi, 2) publishes a third article on this very important subject, the first two having appeared in Volumes XVII and XVIII of the same journal. The means he employs are absolutely simple and entirely devoid of danger, and the results unexpectedly favorable. He gives a brief summary of the observations made during the last thirteen years in the Leipsic Lying-in Hospital. During these thirteen years there were 4,057 living children born in the hospital, and of these 318 suffered from purulent conjunctivitis, or 7·8 per cent. He began his prophylactic treatment on June 1, 1880, and in the seven months of 1880 there was one case in 211 births, or 0·49 per cent., but this case should not be reckoned, as the child's eyes, from an oversight, were not disinfected. In 1881 there was one case in 400 births, or 0·25 per cent; but in this case the conjunctivitis began on the ninth day, probably by infection with the lochial discharge. In 1882 there were two cases in 418 births, or 0·49 per cent. In the first three months of 1883 there were 131 births and no case of ophthalmia. Most obstetricians and ophthalmologists at present believe that the ophthalmia of new-born infants is almost exclusively caused by contact with the secretion of the vaginal mucous membrane during parturition. This view, of course, prevails only in regard to those cases which begin within the first five days after birth. Crédé holds that the normal secretion of the vaginal mucous membrane can only produce a simple catarrhal inflammation of the conjunctiva, and that a specific blenorrhœa of the conjunctiva can never be produced in an infant without there being a specific gonorrhœa of the vaginal passage. If, then, we assume that the contact of the child's eyes with a genital secretion which contains specific poisonous germs produces the blenorrhœa, then the danger of this infection is the greater the longer the contact lasts. It is not always possible to demonstrate a gonorrhœa in the vagina of all parturient women examined. The duration of the stage of incubation is still in an unsettled state, the data being as yet insufficient to formulate any decided

statement. Credé now employs the prophylactic treatment in all children, without exception, immediately after birth. Vaginal injections are employed daily in all women approaching their confinement. As soon as the umbilical cord has been tied and cut, and the child has been bathed, the eyes are washed with ordinary water, and then the lids are slightly opened and a single drop of a two-per-cent. solution of silver nitrate dropped, by means of a glass rod or tube, into the eye; it may be directly on the cornea. No unpleasant consequences have ever been seen to follow, though slight conjunctival hyperæmia and swelling and a slight secretion have often been seen; but these symptoms all disappear without any treatment in from one to two days. In most children there is no reaction. By this method of treatment he has reduced the percentage of cases of ophthalmia neonatorum from 10 to 0.2.

GRANULAR OPHTHALMIA AND JEQUIRITY.—Deneffe ("Recueil d'ophtalmologie," May, 1883) gives the result of his experience with the use of jequirity in the treatment of granular conjunctivitis with or without pannus. He has tried the two solutions recommended by Wecker, and has not found that one is superior to the other. He does not think that the patients should be kept in a darkened room, as advised by Wecker, for he has seen the inflammation caused by the jequirity infusion develop just as violently in the light as in a darkened room; and, when it was not developed in the eyes of a patient when exposed to the light, the confinement of the same patient to a darkened room did not exert any influence in developing it. The pain which accompanies the inflammation is sometimes very violent, and he has occasionally seen patches of erysipelatous inflammation invade the face and neck. From a therapeutical point of view, the jequiritic inflammation gave no results. After a violent inflammation, which was renewed after several weeks, there was no amelioration in the granulations. None of the cases treated in the prescribed way by jequirity at the Ghent clinic showed any amelioration whatever. The drug proved absolutely useless in the treatment of pannus, while in one case it changed a vascular keratitis into a pannus crassus, which subsequently had to be treated by purulent inoculation; and in another it probably produced perforation of the cornea. Deneffe thinks that the granulations spoken of by Moura Brazil, as produced by purulent conjunctivitis, are papillary granulations; the hypertrophy of the papillæ succeeds the conjunctivitis, and the fugitive or transient inflammation produced by jequirity easily cures this hypertrophy. True trachoma, or engorgement of the lymphoid cells, is not the result of inflammation of the conjunctiva, and has nothing in common with hypertrophy of the papillæ. True trachoma is not influenced by jequirity inflammation.

CONTRIBUTION TO THE LITERATURE OF THE SEMI-DECUSSATION OF THE OPTIC-NERVE FIBERS IN THE OPTIC CHIASM OF MAN.—Deutschmann ("Archiv für Ophthalmologie," xxix, 1) gives the results of his examination of the eyes of a deceased inmate of the local lunatic asylum, one of whose eyes had been lost forty years before, and the other one was intact. He found atrophy of the optic nerve on the injured side and atrophy of both optic tracts. The degeneration of the optic nerve close to the chiasm was not complete, and it was partial in both tracts, being more pronounced in the tract on the opposite side. The most marked atrophy was in the optic nerve on the injured side in the inner, upper, and supero-temporal segments, and less marked in the lower and infero-temporal segments. The most marked degeneration was on the inner side of the left optic tract.

CEREBRAL ABSCESS WITH BILATERAL CHOKED DISC; BASILAR MENINGITIS AND PERINEURITIS AND DESCENDING INTERSTITIAL OPTIC NEURITIS.—Deutschmann ("Arch. für Ophthalmologie," xxix, 1) reports a case of this nature occurring in a boy aged nine and a half years. He regards the perineuritis and optic

neuritis as the direct result of the meningitis which accompanied the cerebral abscess. The exudation which distended the intervaginal space arose from the perineuritis, and was of inflammatory origin, as there was no dropsy of the ventricles present. The fact that the inflammatory process was most marked at the ocular end of the optic nerve does not militate against the descending nature of the lesion.

THE TREATMENT OF DETACHMENT OF THE RETINA BY IRIDECTOMY.—Dransart ("Annales d'oculistique," May-June, 1883) advises a return to the method of iridectomy in certain cases of detachment of the retina. He admits that pilocarpine cures certain cases, but the cure of detached retina is one of the greatest desiderata of medical science. The treatment by galvanopuncture has not fulfilled the brilliant hopes to which it at first gave rise. In a patient with anterior synechia, seen some years ago, with loss of vision and severe neuralgic pain on the same side, the ophthalmoscope showed an enormous detachment of the retina. He made a large iridectomy upward, with the result of causing a cessation of the pain and a restoration of the vision. A second ophthalmoscopic examination showed that the retina had become reattached throughout. He has since then performed an iridectomy in cases of detached retina where the patients would consent to it. Three were cases of old detachment, in which the result was relatively successful. In two cases of recent detachment the success was complete, vision being restored in all its integrity. After the operation the patient is kept in bed, with a compressive bandage, and with the very moderate use of pilocarpine (four or five injections for each patient).

UNIOULAR REFLEX IRIDOPLEGIA, ASSOCIATED WITH NECROSIS OF THE ORBITAL ROOF ON THE SAME SIDE, AND WITH DOUBLE OPTIC NEURITIS.—Eales ("Ophthalmic Review," August, 1883) reports a case of this nature in a man aged twenty-eight. On admission to the hospital, September 4, 1882, he complained of continuous headache, with frequent delirium and double optic neuritis. There was a fluctuating swelling above and on the outer side of the right eye. Three years previously he had contracted syphilis. In October, 1881, he received a blow over the right temple, and had suffered ever since with almost continuous headache, but had had no vomiting. Lately a swelling had formed over the right eye. When Eales saw the patient on September 6, 1882, he was suffering from continuous muttering delirium, and was only roused with great difficulty to reply to questions, his answers being for the most part incoherent. He complained of severe pain in the head. There were great swelling, redness, and heat of the upper lid on the right side, most marked just below the external angle of the orbit, between it and the eyeball, presenting distinct fluctuation. The eyeball was not much displaced or protruded, but movement upward was limited. There was well-marked double papillitis of equal intensity in the two eyes. A free incision was made into the swelling under the carbolic spray, and an ounce and a half of fetid pus was evacuated. On introducing the finger into the wound, an area of necrosed bone, as large as a shilling, was felt just within the external angle of the frontal bone, in the roof of the orbital, and apparently not extending very far back. The wound was dressed antiseptically, a drainage-tube being inserted. The patient was taking large doses of potassium iodide and mercuric bichloride, and under this treatment he grew better and was discharged. On May 12, 1883, Eales saw him again, and found the following condition: He was sluggish in comprehending questions, his speech was thick, and his bearing defective in the left ear. From a sinus over the external angle of the right orbit a piece of necrosed bone projected, but there was scarcely any discharge from the sinus. The external angle of the frontal bone and adjoining superciliary ridge ap-

peared to be absent. There was no trace of the previous papillitis, except a few whitish streaks in the immediate vicinity of the disc and vessels. $V = \frac{1}{2} +$. The field of vision was normal for colors. There was slight limitation of motion upward in the right eye. Accommodation was good with either eye up to five inches, but convergence was not maintained, the left eye deviating outward. The right pupil was fixed in a state midway between dilatation and contraction, and did not respond to light, but contracted readily during convergence. On June 14, 1883, he was seized suddenly with loss of power on the right side, accompanied by giddiness and inability to speak, which lasted an hour or so, but he did not lose consciousness. When his speech returned, he could not be understood for several hours. His muscular power was considerably less in the right hand than in the left. These conditions have since remained unaltered. The most interesting point in the case to Eales was the iridoplegia; first, because of its being unocular; second, because of its occurrence in a syphilitic male; and third, because of its association with optic neuritis and cerebral disease, and not with primary optic atrophy and spinal disease, as we usually find it in locomotor ataxy and general paralysis.

LEFT HEMILATERAL ATROPHY OF THE FACE.—Eperon ("Archives d'ophtalmologie," May-June, 1883) reports a case of facial tropho-neurosis in a man aged forty-one. The left orbital cavity was much more pronounced at its upper part than in the normal state, and the left eye much more sunken. The left cheek was without any whiskers, and markedly diminished in volume. The nose, mouth, tongue, and uvula were turned to the left side. The two lips were divided into two unequal parts by an apparently cicatricial furrow. The chin was furrowed and thrown toward the left. The left ear was slightly atrophied, and the hearing on this side slightly impaired. The patient had been healthy up to nine years of age, when he had an attack of measles. Six months later a tumor appeared under the angle of the jaw on the left side, which disappeared at the end of six weeks, and from this period dated the left unilateral atrophy of the face. In the left eye there was a hypermetropia of three dioptries (+ D 3), a very pale optic disc, circumscribed spots in the region of the macula, and atrophy of the choroidal pigment. In the right eye there was a hypermetropia of D 0.5 and a normal fundus. Eperon thinks that the history of this case is a striking confirmation of the theory that hypermetropia is the result of an arrest of development of the eyeball. The arrest of development of the left side of the face, with its cavities and organs, was most pronounced. The right side presented a normal development and an almost emmetropic eye; the left side showed a considerable diminution of all the dimensions and a hypermetropic eye.

SARCOMA OF THE INTERNAL REGION OF THE LEFT EYELID; EXTIRPATION; AUTOPLASTY.—Eperon ("Archives d'ophtalmologie," May-June, 1883) reports a case of this nature occurring in a woman aged thirty-two. The tumor occupied the internal angle of the left eye, the bridge of the nose, and a part of the cheek, and had grown rapidly in the space of six months, so as almost to completely occlude the interpalpebral aperture. The tumor measured 32 mm. in height, was firm, slightly elastic, and easily movable under the skin. It was removed entire by an incision made about a centimetre around its margin, and extending down to the bone all round. The incision began on a level with the inner canthus, about 3 mm. below the palpebral border, the latter being left intact. It then extended vertically downward, ran round the lower part of the tumor, ascended along the side and bridge of the nose, and ended just below the inner end of the eyebrow. To fill in the somewhat irregularly shaped cavity left by the removal of this mass of tissue, Landolt dissected out a flap of trapezoid form in the in-

fra-orbital region, with its pedicle in the malar region. This was made to slide inward and upward until its internal margin met the nasal margin of the incision, and the two were united by sutures. The upper border of the flap was then united by sutures to the upper lip of the incision. The greater part of the gap was thus filled up. The only parts left uncovered were the two extremities, the upper one of which, a small triangle, was closed by the union of the two borders by simple sutures. To cover in the lower end, an oblique incision was made in the inferior portion of the pedicle of the flap, and in the direction of the labial commissure, which enabled the operator to make coaptation between the lower part of the cheek and the inferior border of the flap. The narrow, longitudinal wound made by this manœuvre was easily closed by sutures. Only three vessels were tied during the operation. The patient was discharged in six weeks, and four months later there was no return of the growth.

IODOFORM IN SERPIGINOUS ULCERS OF THE CORNEA.—Galezowski ("Recueil d'ophtalmologie," June, 1883), in recommending the use of iodoform in certain forms of corneal disease, asserts that there are two forms of herpetic ulceration of the cornea: the central ulcer, beginning in one or more herpetic pustules at the center of the cornea, and the marginal ulcer, which is called "*ulcère à coup d'ongle*." Both are developed through the influence of the herpetic, gouty, or arthritic constitution, and both demand the same treatment, both local and constitutional. He advises the use of iodoform in the form of an ointment, one to two grammes of finely-pulverized iodoform to ten grammes of vaseline. It is an excellent antiseptic, and has a powerful reparative action upon ulcerated and necrosed tissues. If well prepared, it is never irritating, but it must be very carefully pulverized. Under the influence of iodoform these ulcers become clean; the necrotic masses are detached from the base of the ulcers and cast off in the tears, and the ulcerative process yields to a reparative process. At the end of fifteen or twenty days the ulcer is filled by a tissue of new formation, and cicatrization is not long delayed.

FIBRO-CHONDROMA, OR HETEROPLASTIC ENCHONDROMA OF VIRCHOW, OF THE SCLEROTIC AND CORNEA IN A CHILD; EXTIRPATION.—Gastaldo ("Revista de Oftalmología Práctica," July, 1883) reports a case of this kind occurring in an infant near the external angle of the right eye. The tumor was white and hard, of a diameter of from six to seven millimetres, of an ovoid form, painless to the touch, and extended from one to two millimetres over the cornea, though it did not quite reach as far as a point overlying the pupillary margin. It was removed without any difficulty, and the case was subsequently treated with compresses dipped in a solution of boracic acid and a bandage. A careful microscopic examination showed the tumor to be a fibro-enchondroma.

CASE OF TRAUMATIC ANEURYSM OF THE LEFT ORBIT CURED BY COMPRESSION OF THE CAROTID ARTERY OF THE SAME SIDE.—Glascott ("Ophthalmic Review," July, 1883) reports a case of this nature in a man, aged forty-two, after a fall of twelve feet down an open hatchway. The night after the accident he noticed a whizzing noise in his head, which has continued ever since. A month after the accident the left eye began to protrude. When first seen by Glascott, the upper lid was swollen, the conjunctiva chemosed, and vision very much reduced. The ocular conjunctival veins were enormously distended and varicose, and the retinal veins were enlarged and tortuous. At the infero-superior angle of the orbit a large vessel was seen pulsating. On applying the stethoscope a quarter of an inch above the supra-orbital notch, a loud blowing murmur was audible, synchronous with the cardiac systole, and was not continuous. The patient was put on ten-grain doses of potassium iodide, and

compression of the left carotid was maintained by the patient with a compressor made of a wooden knitting-needle, with its head protected by a firm pad. Compression was kept up by the patient for two minutes at a time every quarter of an hour. Compression was begun on September 30th, and was kept up, with but slight interruptions, until December 21st. The large vessel at the inferior inner angle had ceased to pulsate, the sclerotic injection had passed away, a few large and tortuous conjunctival veins ramifying over its surface standing out in bold relief. There was no pulsation to be felt at any part of the orbit, the patient was free from pain, and no bruit could be detected. There was an old blood-clot at the bottom of the anterior chamber, and the tension of the eyeball had increased to T+3, and with no perception of light.

HEMERALOPIA AND XEROPHTHALMIA FROM DISTURBANCES OF NUTRITION.—Gouvéa ("Archiv für Ophthalmologie," xxix, 1) has found that, in all the cases of xerophthalmia due to disturbances of nutrition which he has observed, hemeralopia always preceded, by a shorter or longer period, every xerotic change in the conjunctiva; it accompanied this disease, and in the advanced stages of xerophthalmia it became a real amblyopia. In all cases this hemeralopia was accompanied by a more or less marked condition of anæmia, which was caused sometimes by an insufficient nutrition or by an exclusively vegetable diet; sometimes by the presence of *anchylostoma duodenale* in the intestinal canal; sometimes by hæmorrhages; sometimes by long-continued febrile disorders; but in all the cases the patients had been more or less exposed to the action of the sun's rays or of some other bright light. He found that the hemeralopia sometimes appeared epidemically in a large number of persons. The blinding by bright light he regards as the exciting cause of the hemeralopia. In the beginning of the hemeralopia the conjunctiva is almost bloodless, but afterward shows not a trace of any blood-vessels. Near the corneal margin it becomes of a dark color, and loses its brilliancy and lubricity. The next symptom is the development of a froth-like substance which is attached to the more exposed portions of the ocular conjunctiva, and to the conjunctival margin of the cornea if there is any raw surface here. The mucous membrane becomes dryer, and finally assumes the skin-like appearance which von Graefe described as an acute xerosis. In this state the sensibility of the cornea is almost lost; and at this period there is observed for the first time a subconjunctival and circum-corneal venous injection, accompanied by photophobia and lachrymation, and followed by a diffuse opacity of the cornea, which, beginning at the margin, spreads over the entire cornea. Afterward, pale-red, flattened follicles are developed in the conjunctival fornix; the frothy substance increases so that it forms actual scales on both sides of the cornea, and even upon it. The xerosis extends over the entire ocular conjunctiva, the subconjunctival veins become more injected, and the sclera assumes a dark-blue color. In view of all these symptoms, Gouvéa proposes for this disease the name of xerophthalmia cachectica. The treatment must be particularly directed toward improving the depraved general condition of the patient. Locally, Gouvéa recommends steam baths of 40° centigrade for the cornea, several times a day, and the eyes are to be kept bandaged in the intervals.

THE ACTION OF CONTINUOUS ELECTRIC CURRENTS APPLIED IN THE NEIGHBORHOOD OF THE BRAIN, AND THE RESULTS WHICH THEY PRODUCE, ESPECIALLY ON THE EYE.—Grandmont ("Recueil d'ophtalmologie," July, 1888) has been making some experiments upon the action of the galvanic current upon the brain and eye, and his method of procedure is as follows: The electrodes of his battery consist of discs of coke, covered with chamois-skin. The negative pole is placed above the orbit over the course of the supra-orbital nerve or near it. The positive pole is placed on the neck behind the angle of the jaw, nearly

in the direction of the superior cervical ganglion. He avoids producing phosphenes by keeping the electrodes immovable. The current is allowed to pass for four or five minutes, not longer. Grandmont found it very difficult to determine whether, during the passage of the current, there was any augmentation or contraction of the vessels of the fundus. He also found it fully as difficult to determine whether any contraction of the pupil took place. To facilitate these observations, he devised what he calls an ocular thermometer, which measures mathematically the modifications obtained in experimentation on the eye. It consists of a shallow plate or basin, so curved as to fit accurately into the lower conjunctival cul-de-sac without causing the patient any pain. The stem or pedicle is divided into tenths of a degree. By this instrument he has discovered that, after the application of the continuous current, the ocular temperature has been lowered from two to six tenths of a degree. At the moment of the passage or of the interruption of the current, phosphenes are also seen, and these subjective sensations are the more luminous the less the retina is altered. In cases of long-continued amaurosis, even a very pale sensation of light can scarcely be expected.

THE REPRESENTATION OF THE LIMITS OF THE VISUAL FIELD.—Hilbert ("Arch. f. Augenheilk.," xii, 4) has been investigating the various means at our disposal for representing the limits of the field of vision, and comes to the following conclusions: 1. The visual field marked out upon the blackboard is the most useful for the practical man. 2. An entirely correct idea of the configuration of the visual field can only be obtained when a Scherk's perimeter is employed. 3. The visual fields registered by the perimeter-schemes or tables are distortions. 4. The angles belonging to the visual fields presented by the blackboard may easily be reckoned or calculated. 5. A visual field marked out by angular measurements may easily be constructed as a surface-projection. 6. The position of the macula lutea belongs in the center of the visual field.

FOREIGN BODIES ENCAPSULATED IN THE BACKGROUND OF THE EYE, WITH MAINTENANCE OF GOOD VISION.—Knapp ("Archiv für Augenheilkunde," xii, 3) reviews the twelve cases of this kind hitherto reported, and adds one of his own, in which the cornea, iris, lens, and vitreous were perforated by a fragment of iron, which became partially encapsulated in the retina, with one end lying free in the vitreous. There was a circumscribed scotoma, with vision of $\frac{2}{3}$. In all the cases but one the size of the foreign body was not above 2 mm. in diameter. In all but two of the cases the foreign body was either iron or steel. In all, the inflammatory reaction was but slight. The lesions in the fundus were circumscribed lacerations of the retina and choroid, and hæmorrhages resulted in circumscribed thickening of the retina and circumscribed pigmentation and atrophy of the choroid. The functional disturbances consisted first in darkening of the visual field, later in a permanent scotoma which was larger than the site of the foreign body. The central visual acuity was more or less well preserved in all the cases.

A CASE OF TRAUMATIC PULSATING EXOPHTHALMUS PARTIALLY CURED BY LIGATURE OF THE COMMON CAROTID; TOTALLY CURED BY EXTIRPATION OF THE ANEURYSMAL VARIX OF THE ORBIT.—Knapp ("Arch. of Ophthalmology," xii, 2) reports a case of this kind in a woman aged forty-eight. As the result of a blow on the left temple seven years before, she had complete left-sided facial paralysis, which had never disappeared. Soon after the injury the eyelids were swollen, and the eye protruded so that the lids could not be closed, but the sight was good. In the course of some months she heard a throbbing, whirling noise in her head. Four years after the injury the vision of the left eye began to fail. When Knapp first saw her the protrusion of the eye was forward and downward, and the

lids could not be closed over it. Motility was limited in all directions. Lens opaque, but perception and projection of light good. Lids blue-red, and greatly swollen. Lids, temple, forehead, nose, and upper parts of cheek pervaded by a dense network of tortuous and dilated blood-vessels, varying in size from that of a thin straw to that of a large quill, and all pulsating visibly. The skin was swollen and red, and the facial paralysis still marked. With the stethoscope, aneurysmal whirring was heard wherever the blood-vessels were distended. The same bruit was audible and well-pronounced in the mastoid and temporal regions. A diagnosis of traumatic pulsating exophthalmus, due to arterio-venous communication in the left cavernous sinus, after a rupture of the internal carotid, was made. Dr. H. B. Sands tied the left common carotid artery on November 29, 1880, a carbolized catgut ligature being applied to the artery just above the omohyoid muscle. Immediately after the operation a faint systolic murmur was heard over the eyeball, and forty-eight hours later feeble pulsation was detected in the vessels above the orbit. In the course of a year the swollen vessels of the face gradually diminished in size and disappeared. During the summer of 1882 the orbital part of the disease took a new start, and the eyeball protruded so much that the lids could not be closed over it. An ulcer developed on the lower part of the cornea, and led to total slough of the cornea. The upper lid was distended by irregular, red, vermiform intumescences. Pulsation was felt in all parts of the tumor, and a distinct aneurysmal bruit was heard over the whole tumor. Knapp first enucleated the eyeball, and then found the whole orbit and adjacent region filled with an irregular, pulsating mass, and he then determined to remove the tumor as a whole after enlarging the palpebral fissure toward the temple by an incision; the large blood-vessels in the upper part of the tumor were carefully dissected from the overlying skin. At the orbital margin the vascular mass was found to press directly against the bony walls, but was separated from the periosteum by a thin layer of connective tissue. Dissection here was carried on carefully with strabismus scissors and the finger. Deeper in the orbit the connection between the tumor and orbital wall was looser. Penetrating in this way from the outer-upper corner of the orbit toward the apex, it was found that near the apex the tumor contracted into a single resistant, pulsating vessel, about as thick as the little finger. When the whole tumor was separated from its surroundings, a ligature was placed round the pedicle as near the apex of the orbit as possible, and the pedicle was then divided. The patient made a slow but good recovery, and eight months later there was no return of the noise in the head or of the pulsation.

(To be concluded.)

Miscellany.

THERAPEUTICAL NOTES.—*Acetate of Morphine Hypodermically for Seasickness.*—Mr. Philip Vincent, Surgeon to the Cunard Royal Mail Service ("British Medical Journal," August 18, 1883), has come to the conclusion, after trying nearly all the usual remedies for seasickness, that the hypodermic injection of from one third to one half a grain of acetate of morphine is by far the most useful of all remedial measures.

Ptosis and Diplopia following the Administration of Gelsemium.—Mr. C. H. Watts Parkinson ("British Medical Journal," August 18, 1883) reports a case in which three-minim doses of liquor gelsemii fluid, U. S. P., given every four hours, caused, within twenty-four hours, diplopia and dimness of sight, and also ptosis—complete of the left eyelid, partial of the right. The drug had been given, together with a quinine

mixture, for severe neuralgia of the face. The neuralgia was speedily cured, and the diplopia and ptosis were relieved within twenty-four hours by a simple quinine mixture.

The Direct Action of Ethyl (Conanon) Alcohol upon the Heart.—Dr. H. Newell Martin, of Baltimore, Professor of Biology in the Johns Hopkins University, in a paper read before the Medical and Chirurgical Faculty of Maryland ("Maryland Medical Journal," September 8, 1883), detailed the results of his experimental investigations on the direct action of ethyl alcohol upon the heart. Professor Martin found that half a fluidounce of absolute alcohol, diluted with nearly two ounces of water, given in one dose to a human subject who had been a total abstainer, caused no quickening of the pulse. The dose was, however, sufficiently large to cause dizziness. On the other hand, a little sweetened water occasioned in the same subject (who supposed he was taking alcohol) an almost immediate increase of four beats in the pulse rate. This increase the experimenter attributed, however, more to the muscular exertion made in taking the liquid than to any other except psychological causes. Numerous other experiments were made upon dogs, to determine the direct and immediate action of alcohol upon the heart, both as to the rate of pulsation and as to the amount of work done in any given time. In order to eliminate the indirect action of the alcohol—the effect that would be reflected from the central nervous system—the heart and lungs of the animal were isolated from the rest of the body. Uniform respiration was kept up artificially. The heart was fed by defibrinated blood previously obtained from other dogs, constant pressure being secured by Mariotte bottles. Certain of these bottles held blood containing a definite known percentage of alcohol. The blood in other bottles was free from alcohol. Certain stop-cocks made it possible to connect any of the bottles at will. The apparatus recorded the pulse rate and the arterial pressure automatically. Furthermore, the amount of blood pumped during any given period of time could be easily calculated. The two sorts of blood, one free from and the other containing alcohol, were alternately supplied for the space of one minute. To avoid ascribing to the alcohol any results that might be due to independent enfeeblement of the heart, all experiments in which the heart did not recover from the action of the alcohol were rejected.

It was found that alcohol, in proportions not directly poisonous, did not affect the rate of pulsation. Blood containing one eighth per cent. by volume of absolute alcohol did not affect the amount of work done. Blood containing one fourth per cent. by volume of absolute alcohol almost invariably diminished markedly the work done. Blood containing one half per cent. always diminished it, and might so reduce the amount pumped by the left ventricle that it was not sufficient to supply the coronary arteries. [One fourth per cent. of the blood of a man of 150 pounds weight would be about 0.46 of an ounce. This amount of alcohol is less than that contained in many a single drink of whisky or brandy.]

The alcohol, in Professor Martin's opinion, did not act on the heart as it flowed through its cavities, but only when it reached the muscular and nervous tissues of the organ supplied by the coronary arteries and their ramifications. It was found that, if the pericardial sac was cut away, blood containing one half per cent. of alcohol had little or no effect on the work done, even by the same heart that had been markedly influenced by blood containing the same percentage of alcohol before the pericardium was removed. It was found, furthermore, that, under the influence of alcoholic blood, the ventricles did not contract completely. Even at the height of the systole, the heart nearly or quite filled the pericardial sac. There was, therefore, little room for further expansion during diastole, unless the surrounding sac was cut away. These facts led to the conclusion that the direct action of the alcohol upon the muscular fibers of the heart was more at first to diminish their tone and elasticity than their contractile power. The diminution of work was manifestly due to the disadvantage under which a flabby muscle must act when it has not room for its full play in contraction and relaxation. However, blood containing one fourth to one half per cent. of alcohol will in time decrease the work done, and finally reduce it to zero, even with the pericardium removed. One per cent. of alcohol will produce the same result more speedily. Exactly how the alcohol acts on the ultimate muscular fibers of the heart Pro-

fessor Martin does not attempt to say. As alcoholic blood holds its oxygen more firmly, and, therefore, yields it less readily to the tissues, and as the heart in the previous experiments assumed an asphyxiated appearance, it is probable that at least part of the deleterious action of the alcohol is due to the deprivation of oxygen it causes.

Further experiments showed that, if given by the stomach, a much larger percentage of alcohol was required to influence the blood pressure perceptibly. Either the absorption was so slow that the heart-poisoning limit was not at any moment reached, or, more probably, the alcohol was detained by the liver or other organs, and held back from the heart. One fourth per cent. introduced, in a saline solution, into the jugular vein caused a temporary lowering of blood pressure; but the effect scarcely lasted longer than the brief period during which it was immediately coursing through the vessels of the heart itself. The blood evidently parted with its alcohol before it was returned to the heart, to such an extent, at least, that not enough was left to produce distinct results.

Professor Martin made no attempt to study the chronic action of alcohol, deeming that a pathological rather than a physiological question.

Cold Alcohol as an Anæsthetic; its Value in the Treatment of Burns and Scalds of the Extremities.—Dr. Roger Keys, of Philadelphia ("Medical Bulletin," September, 1883), has found that alcohol at between 47° and 55° F. possesses decided anæsthetic properties. The pain of burns and scalds of the extremities is speedily and entirely removed by immersing the parts in alcohol of this temperature. If this treatment be pursued in time, the formation of blisters can be prevented. The temperature of the alcohol is to be kept within the "anæsthetic range" by means of ice and a thermometer. The immersion is to be continued until the pain is bearable on its discontinuance. The alcohol retains its anæsthetic properties even when diluted to twenty-five per cent. Dr. Keys discovered these facts some years ago when trying to relieve the pain he was suffering from burns on his own hands. He had for years successfully treated burns and scalds of the extremities with cold alcohol. He advocates the same treatment in the case of more extensive burns of the body and trunk, believing it affords the best means of averting death. [If "cold alcohol" really has anæsthetic properties, what hinders its use in felons, contusions, and injuries of the hands and feet, and, indeed, in *all* painful affections of the extremities?]]

EFFECT OF METALLIC POISONS ON THE SPINAL CORD.—The affections of the nervous system produced by contamination with certain metals, as lead and mercury, have been studied more extensively clinically than pathologically, and even yet it may be held to be undetermined whether the action of the poison is upon the peripheral or the central apparatus. Dr. Popow has recently put on record the results of an anatomical investigation upon animals (chiefly dogs) poisoned by arsenic, lead, and mercury, respectively (Virchow's "Archiv," 93, Heft 2), and in most cases he was careful to administer the poisons in varying quantities, so as to contrast the effects of acute and chronic poisoning. The general result of his inquiry goes to show that marked changes of an inflammatory character occur in the spinal cord, both in the gray and white matter, under all these conditions. In acute arsenical poisoning the spinal cord was softened, the gray matter especially being reddened and swollen; there was proliferation of the nuclei of the blood-vessels, and an exudation of a peculiar hyaloid substance. The nerve-cells were swollen, their processes dwindled, and their protoplasm granular or vacuolated, while in the white columns the axis cylinders showed irregular thickenings. In chronic poisoning it was difficult to discriminate between the two portions of the cord, the divided surface having a yellowish-red color throughout; the walls of the vessels were thickened, and hyaline masses abounded; the nerve-cells vacuolated, or shrunken and pigmented; while free pigment masses, representing traces of hæmorrhage, occurred throughout the sections. In other words, there is, in poisoning by arsenic, a central myelitis at first, and later a diffuse myelitis. Very similar changes were found in the spinal cord after poisoning by lead—namely, exudation from blood-vessels; a general affection of the nerve-cells, beginning as cloudy swelling, and passing into atrophy and pigmentation; and inflammatory swelling of the axis cylinders.

In mercurial poisoning, the early changes consist of hyperæmia of membranes and of the cord, followed by hæmorrhages, inflammatory exudation, and changes in the nerve-substance hardly differing from those seen in the other two cases. In each instance the peripheral nerves and the nerve-roots showed no alteration; so that the conclusion is that the paralysis, spasms, etc., characteristic of the toxic effects of these metals depend upon a central rather than a peripheral disturbance, all the degenerative changes described as occurring in nerves and muscles being strictly deuteropathic.—*Lancet*.

HOMŒOPATHY.—In answer to a correspondent, who had proposed a test of homœopathy in one of the London hospitals, the "*Lancet*" says: "Our correspondent does not seem to be aware that homœopathy scarcely exists as *understood by Hahnemann*. Its most popular exponent in London has published a new doctrine of therapeutics, directly contradicting Hahnemann's fundamental principle. We published last week the suggestion of a Hahnemannian journal, to drop the word 'homœopathy' out of existence, as the only means of averting the imminent dissolution of the school. We are quite aware that there is a section of the public that believe in homœopathy; but they are attended by those who have abandoned all its essential principles while still retaining the name. The argument that homœopathy only needs a trial is quite untenable. It has been on its trial eighty years—as long, in fact, as vaccination. While vaccination is accepted by the whole world of scientific and rational men, homœopathy is without a chair in any university of Europe, and it is proposed by its own leaders to drop the very name. The attitude of scientific medicine to it *ab initio* is thus thoroughly justified. The attempt to take shelter under the name of Dr. Sydney Ringer is now rather a favorite device of homœopaths. But it will not save either their scientific or their moral position. Dr. Ringer takes medicines as he finds them, and investigates their action in health and disease unhampered by authority, and he does not trade on a name."

A CASE OF DEATH FROM A WASP STING has just occurred in the person of Miss Arkwright, aged fifty-five, of Mark Hall, near Harlow, who died within half an hour after receiving the sting on her little finger. At the inquest it was stated that she fainted almost immediately after being stung, and never recovered consciousness. Dr. Day deposed that death ensued from syncope, produced from excessive pain caused by the wasp sting.—*Med. Times and Gazette*.

ARMY INTELLIGENCE.—*Official List of Changes of Officers serving in the Medical Department of the United States Army from September 29, 1883, to October 6, 1883.*—TILTON, H. R., Major and Surgeon. Assigned to duty as Post Surgeon at Fort Wayne, Michigan. Par. 4, S. O. 183, Department of the East, September 28, 1883. — BUCHEMIN, LOUIS, Captain and Assistant Surgeon. Relieved from duty at Fort Columbus, New York Harbor, and assigned to duty at Fort Wadsworth, New York. Par. 5, S. O. 183, Department of the East, September 28, 1883.

NAVAL INTELLIGENCE.—*Official List of Changes in the Medical Corps of the Navy during the week ending October 6, 1883.*—Surgeon F. L. Du Bois, detached from Naval Rendezvous, Philadelphia, and ordered as member of the Medical Examining Board, Philadelphia. — Passed Assistant Surgeon Charles W. Rush, detached from the Naval Hospital, New York, and ordered to the receiving ship Colorado, New York. — Passed Assistant Surgeon M. D. Jones, detached from the Naval Hospital, Washington, D. C., and ordered to the Naval Hospital, New York. — Passed Assistant Surgeon Richard Ashbridge, detached from the Naval Academy, and ordered to the United States steamer Swatara.

SOCIETY MEETINGS FOR THE COMING WEEK.—*Monday, October 15th:* Medico-chirurgical Society of German Physicians. *Tuesday, October 16th:* New York Obstetrical Society (private); Medical Society of the County of Kings, N. Y.; Medical Society of the County of Westchester, N. Y.; Medical Society of the County of Hunterdon, N. J. (Flemington); Ogdensburg (N. Y.) Medical Association. *Wednesday, October 17th:* Northwestern Medical and Surgical Society (private); New Jersey Academy of Medicine (Newark). *Thursday, October 18th:* New York Academy of Medicine.

Lectures and Addresses.

A LECTURE ON
SOME FORMS OF
PUERPERAL HÆMORRHAGE,

DELIVERED AT THE BELLEVUE HOSPITAL MEDICAL COLLEGE,

By WILLIAM T. LUSK, M.D.,

PROFESSOR OF OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN, AND
CLINICAL MIDWIFERY.

*Placenta Prævia.—Accidental Hæmorrhage.—Hæmorrhage from
Lacerations of the Genital Canal.*

Placenta Prævia.

GENTLEMEN: When you meet with a case of placenta prævia you must, in the first place, bear in mind that delivery can not be accomplished without a previous dilatation of the cervix, and, second, that the cervix can not dilate without causing a separation of the placenta, and, third, that separation of the placenta can not take place without hæmorrhage. The subject for us to consider, therefore, is, how we can control the hæmorrhage and get the cervix dilated as rapidly as possible.

Now, there is one thing I want to say in regard to the danger in these cases. Suppose you recognize the existence of placenta prævia during the early months of pregnancy—that is to say, before the seventh month. If the labor is terminated within this period, the prognosis for the mother is favorable, and the dangers are next to nothing, but after the seventh month they increase very rapidly. The prognosis for the child is always very doubtful.

If you are called to a patient who is having a hæmorrhage, and, upon examination, you discover a placenta prævia, and you know that she is in the last months of pregnancy, some of the books tell you that your best plan of treatment is to put the patient on her back and keep her quiet in bed, and give her cool drinks and opium, and apply ice to the vulva, and so on, and then do nothing more but wait, and let your patient alone until labor-pains set in, and then you should be on hand to stand by her and render whatever assistance is necessary. This waiting plan is advocated for the sake of the child, and to allow time for overcoming the rigidity of the cervix, and so for these two reasons you are recommended to temporize, and let the woman go on to the end of pregnancy.

But there are some reasons why this plan is not expedient, even in the interest of the child. If the hæmorrhage first comes on between the twenty-eighth and thirty-second week, the chances are that you have to deal with a placenta prævia centralis, and the chances of saving the child's life in a placenta prævia centralis are in any case too small to allow of the least consideration. The hæmorrhages in such a case are apt to be repeated, and so, even if the child escapes one, it may be killed by the second or third. There is, therefore, no excuse for temporizing here. But, if the hæmorrhage comes on after the thirty-second week, if labor is induced and delivery then accomplished, the chances of saving the child's life will be better than by letting the

pregnancy go on, when the mother and child will both be subjected to the danger of a profuse hæmorrhage coming on at some time when you are absent, and it may prove fatal before you can be summoned. For the safety of the mother, all experience is in favor of inducing premature labor, and the results of this treatment are much better than where the pregnancy is allowed to go on until labor sets in spontaneously. In the latter case the mortality is from one third to one fifth. But, out of seventy-four cases where labor has been induced at the first appearance of hæmorrhage, the women have survived in seventy. Sixteen died sooner or later, four during labor, and the rest in the week following. Forceful dilatation of the cervix was employed here. The induction of premature labor therefore seems to be advisable if the diagnosis can be made out clearly. You should not let the case go on, for fear of accident while you are away, while if you immediately induce premature labor you can stand by and watch the progress of your case from the beginning to the end. The trouble is, if you wait, that hæmorrhage may come on and you may not be called in until it is too late to save the patient.

But suppose hæmorrhage does occur while you are at hand, what shall you do? In the first place, you will be governed by whether the child is alive or dead, and further by the extent of the placental attachment, the length and condition of the cervix, the character of the pains, and the condition of the child, if alive. If you find the cervix long, narrow, and undilated, then introduce into the vagina a tampon, so as to completely fill it up. You may use any soft material for this purpose, and you should pack it in so as to crowd the cervix well up against the placenta, and in this way labor-pains are excited, and the blood is pressed out and coagulates between the cervix and placenta, and so prevents further bleeding. If you have the materials at hand, take pieces of cotton and soak them in water to which have been added carbolic acid and glycerin, and then pack these very tightly into the vagina. Some prefer to use a rubber bag in the vagina, filled with cold water. While this is a useful appliance, it is rarely seen in this country, and you probably would not come across one when you wanted it, and so you will be obliged to use old linen or cotton rags, such as you can find in the house, to pack into the vagina. Keep a tampon in the vagina as long as the cervix remains long and narrow. But as soon as it is dilated so that you can introduce a Barnes dilator, this will be better; it will check the hæmorrhage just the same as the vaginal tampon, and it will also stimulate the uterus to contract, and dilate the cervix. Three desirable ends are accomplished by this Barnes bag. It stops the hæmorrhage, hastens dilatation of the cervix, and induces contractions of the uterus. When the cervix has so far dilated that the bag no longer fills it well, then inject more water so as to enlarge it, and repeat this as often as necessary. In this way you may expect, in a large proportion of cases, to dilate the cervix in a very short time. As the cervix dilates from above downward, by the time the os externum has reached the size of the top of a wine-glass the os internum is all dilated, and it is said you may then pro-

ceed to extract the child. But I have found that death occurs in a great many cases from rupture of the uterus from forcible dilatation of the cervix, and so I think it is best not to be in too much of a hurry to deliver, but wait until the cervix is fully expanded throughout. After dilating the cervix, the next thing to do is to rupture the membranes, provided the head presents, and then the head comes down and blocks up the lower uterine segment; and, if the placenta is now detached, the head presses against the cervical walls and so checks the hæmorrhage. As you rupture the membranes, it is well to have an assistant press down with his hands through the anterior abdominal wall, so as to push the head down into the lower orifice of the uterus. In these cases it is proper to give ergot. The induction of uterine contractions in placenta prævia by means of ergot is exceedingly difficult to obtain. But, if you can bring them on thus, it is an advantage so far as the safety of the mother is concerned, and the safety of the child is not to be considered here. The inducing of uterine contractions is a very good way to check the hæmorrhage; and so after you have carried out the other indications of tamponing the vagina, introducing a Barnes dilator and rupturing the membranes, and forcing the head down into the lower cervical orifice, you should not hesitate to use ergot and then allow the labor to go on. If it does not follow a natural course, you can then put on the forceps and deliver. But, if, after the rupture of the membranes, there is no descent of the head, and the pains are feeble and the hæmorrhage continues, you can not wait longer, but should pass your hand up through the cervix and into the uterus, and so get hold of an extremity and bring the child down, and then the pressure of its body acts as a tampon, and checks the hæmorrhage.

Now, the case I have supposed so far is one where the placenta is attached to the margin, or only to a slight extent over the cervix uteri—that is, what is called a marginal or a partial form of placenta prævia. When, however, you have a case of complete attachment of the placenta over the cervix, or a placenta centralis, there is not much chance for delay. If you find, upon examination, that it has an extensive adhesion about the os, the first thing to do is to sweep your finger around and detach the placenta from the lower uterine segment, for then the uterus retracts and the hæmorrhage ceases. This treatment was first inaugurated by Simpson, of Edinburgh, who showed that, if the placenta were loosened from its attachments, the hæmorrhage would cease, or be only slight. He introduced his hand into the uterus and removed the placenta entire in some cases, and the hæmorrhage ceased at once. The uterus generally contracts after the placenta is expelled, but before this the hæmorrhage is apt to continue. It has not been found best in practice to introduce the whole hand so as to completely detach the placenta, but rather, after the cervix has begun to dilate, it is advised generally to pass half or the whole of the hand into the vagina and then insinuate two fingers between the cervix and the placenta, and strip off the placenta to the extent of about two inches and a half all round. Of course, after this procedure there will be some hæmorrhage from the torn vessels, but this will be

kept within moderate limits by the retraction of the uterine walls, and this can be still further facilitated by introducing a Barnes dilator, which not only stretches the cervix, but at the same time acts as a tampon, and also as a hæmostatic, if filled with ice-water. As soon as the cervix is dilated to a point where you can introduce the whole hand into the uterus, pass it up between the placenta and cervix; or, if this is impossible, then pass it directly through the body of the placenta, and seize a foot and deliver by the operation of turning. If the child happens to be in the transverse position, or with the head downward, then get an assistant to manipulate through the abdominal walls and push the child around until the breech and knees are brought as nearly in relation to the cervix uteri as possible, then rupture the membranes and catch hold of a knee and bring down the extremity, and so tampon the cervix with the child's body and arrest further hæmorrhage. All the preliminary tamponing of the vagina and cervix presupposes that the membranes are yet intact, for otherwise this measure would be of no use, because then you would get an internal hæmorrhage into the uterine cavity, and this would be more speedily fatal than leaving the patient alone.

When you have a partial placenta prævia, detach that portion covering the os and bring it down against the cervical wall, and then compress it between a Barnes dilator and the cervix; the pressure stops the hæmorrhage from the open mouths of the vessels, and you thus convert the case into a placenta prævia laterata. After the cervix is dilated, proceed as before.

After the child is extracted, the next thing is to see that the hæmorrhage does not return. It is well, therefore, to have at hand some persulphate of iron and cotton in small swabs, and then, if the hæmorrhage continues, introduce a speculum, catch hold of the cervix, drag it down with a pair of forceps, dip a piece of the cotton into the persulphate of iron, and rub the bleeding mouths of the vessels over with this. Having checked the hæmorrhage, you must next look out for septic poisoning, which is very apt to occur now, for large soft plugs are liable to form in the mouths of the uterine vessels, and these act as sponges to soak up septic material from the decomposing lochia. So you must guard against this accident by frequent douchings of the vagina with antiseptic fluids. So much, then, for placenta prævia.

Accidental Hæmorrhage.

Now, it is possible for a hæmorrhage to take place from a partial detachment of a placenta which does not occupy the lower zone of the uterus. When hæmorrhage occurs from a placenta attached in the lower zone of the uterus, it is called unavoidable hæmorrhage; but, if from the upper zone, it is called an accidental hæmorrhage. An accidental hæmorrhage may result from irregular uterine contractions, from accidents or violence, from straining in moving the bowels, or from mental causes, etc., but often we are unable to determine the cause. The hæmorrhage may be at the central portion of the placenta, and then only a partial detachment may take place; but sometimes these hæmorrhages are very extensive, and so cause a considerable

amount of detachment. The whole border of the placenta may remain unbroken, or it may give way in some part, and then the blood may dissect its way out and appear externally; or the blood may pass between the uterine walls and the membranes until the membranes rupture, and the blood then passes into the uterine cavity and is confined there, or the head may so block up the lower orifice of the uterus that the blood can not pass out, but will be arrested at the cervix uteri, and in these cases the hæmorrhage will not appear externally. This is called concealed hæmorrhage.

Internal hæmorrhages are generally associated with painful uterine contractions, and an increase in the size of the uterus, and sometimes with a bulging out of a portion of its walls; and with these there will be other symptoms, such as sudden faintness, pallor, a weak pulse, vomiting, and other signs of internal hæmorrhage in any part of the body. It is not always easy to distinguish between this condition and rupture of the uterus. But rupture of the uterus rarely occurs until after rupture of the membranes, and not till then does the hæmorrhage take place; and after the rupture the uterus, as a rule, diminishes in size; and, finally, when the uterus ruptures, the child usually recedes from the pelvic brim. But none of these things occur in accidental hæmorrhage.

The prognosis in these cases is very bad. Out of one hundred and seven cases collected by Goodell, the mother died in one half or more, while the lives of only six of the children were saved. I would make a distinction in the prognosis according to whether the hæmorrhage was external or internal, for in the former case the diagnosis is less obscure.

I would now make no difference in the treatment of the two forms, for I believe, in either case, the best plan is to introduce a Barnes dilator. What we want is to induce uterine contractions, for, if the membranes are intact and the uterus is made to contract, the amount of hæmorrhage that can occur must be small. The danger is that the blood will fill the relaxed uterus, or the space between it and the membranes, and so cause a bulging out of a part of its walls. But, if the uterus is firmly contracted down upon the ovum, there will be but a small space for the blood to accumulate in. These contractions are induced by the Barnes dilator, and at the same time it aids in dilating the cervix; and, as soon as dilatation is completed and uterine contractions come on, the danger is nearly removed. You should now rupture the membranes, and pass the hand up into the uterine cavity and catch hold of the child's feet; as you extract it an assistant should make compression on the abdominal walls and follow the uterus down, and so check any hæmorrhage that might follow from the relaxation of the uterus. You must be careful not to rupture the membranes until the dilatation of the cervix is complete, for, if you do, the blood will continue to collect in the cavity of the uterus, and the danger will be no less than before.

Hæmorrhage from Lacerations.

Ruptures of the genital canal, of greater or less extent, occur in nearly every case of labor; but in some cases they are very decided, and require immediate attention. We

may have such a rupture of the perinæum, or vagina, or vestibule, or cervix, or uterus itself, or of the symphysis pubis, or a fracture of any portion of the pelvis. Rupture sometimes takes place in the vestibule or the bulbous portion of the vagina, and in such cases a very profuse bleeding may take place. So, if you have a post-partum hæmorrhage, and find the uterus firmly contracted, you can be sure that the blood does not come from the uterus, though you may not know where it is from, and sometimes in these cases it is from the vestibule. In these cases you can not take up the bleeding vessels one by one and tie them, but sometimes injections of cold water or applications of ice will check the bleeding. Some say you can use persulphate of iron here, but this sometimes will not stop the hæmorrhage, even after it has been in contact with the bleeding surface for an hour or two; but, as soon as you remove the cloth wet with it, the bleeding starts afresh. In such cases it is best to simply put in one or two deep sutures, extending around the two sides of the laceration, and bring the bleeding points together; this will stop the hæmorrhage at once, and with very little pain.

Lacerations of the vagina are not at all uncommon, especially in forceps deliveries where the forceps is put on so that the blades do not fit close to the child's head, but project beyond it and so make deep grooves in the vagina. Sometimes these are so insignificant as not to be noticed, or they produce only slight symptoms, and heal after a short while. If you keep the parts clean and the patient in bed, in many cases she will never know that the injury has existed. But, if the laceration is more extensive and in the upper portion of the vagina, it is a different thing. For, if the tissues in this vicinity are torn to any extent and left to themselves, sloughing will occur, and in this way the peritoneal cavity may be opened and your patient suddenly show signs of collapse, when, upon examination of the parts, you will find that the intestines have come down into the vagina. It is, therefore, a good plan, in all cases of post-partum hæmorrhage, to find out where the bleeding comes from, and, if you find it is from the upper portion of the vagina, you had better pull the bleeding point down outside the vulva, and put in a few stitches and bring the edges together. If you do this, the hæmorrhage will be but a trivial affair.

Laceration of the cervix in the vaginal portion is of quite common occurrence, either from excessive rigidity of the os, or because the presentation of the child was such that one half of the cervix bulged out and was subjected to too much pressure during delivery. If the laceration of the cervix is not associated with hæmorrhage, your attention will probably not be called to it, and in time it will heal up perfectly. I make it a rule, after the placenta is expelled, to pass my finger up into the vagina, so that I may know how far the cervix is torn, if at all. It is a great deal better to know of a laceration existing than to discover it only after your patient has had a chill, followed by fever, on the third or fourth day after delivery. If the laceration is left alone, the parts will heal, but the edges will not unite, and, if the patient has trouble from this source afterward, the edges will have to be brought together by an operation. If the laceration of the cervix is followed by much hæmorrhage

to check this you may use hot-water injections, or put in a cotton tampon soaked in a solution of persulphate of iron and press it up well against the bleeding tissues of the cervix. But in case there is a good deal of irritation about, healing may be delayed, and the wound in the cervix renders it liable to suck up infected materials, and so is a source of danger. It is always a good plan, therefore, at the time of the laceration, to take a pair of vulsella forceps, and, as an assistant presses down the fundus of the uterus through the abdominal walls, you can draw the cervix down, and then with a needle and thread sew up the wound, as the tissue is now patulous and easy to work upon. In this way you can check the hæmorrhage, and a suture makes the best hæmostatic we have.

Original Communications.

ANEURYSM OF THE INTERNAL CAROTID; LIGATURE OF THE COMMON AND EXTERNAL CAROTID AND THE SUPERIOR THYROID ARTERIES.*

By JOHN A. WYETH, M. D.,

SURGEON TO MOUNT SINAI AND ST. ELIZABETH'S HOSPITALS; PROFESSOR OF
GENERAL AND GENITO-URINARY SURGERY IN THE NEW YORK POLYCLINIC.

This patient presents herself for treatment on account of a swelling situated below the left ear, and at the angle of the inferior maxilla. She is sixty years old, a seamstress by occupation, unmarried, and has had no children. Her father died when she was a child, and she knows nothing of the cause of his death. Her mother died from the wear and tear of a long life of poverty, and not from any acute disease. She has ten brothers and sisters buried, and one sister living. Six of the deaths occurred in childhood.

From her family history we are led to expect in this patient a delicate constitution—one which would show earlier than usual the lesions of the arterial system so common to advanced age.

She tells us that she has been temperate in her habits of life in all respects. Taking her word, and she impresses me as a reliable woman, she has had no serious illness; no syphilis, no rheumatism, no renal malady, no protracted fever. Certainly no signs of these disasters are present, excepting one that is not pathognomonic.

She has had "sick headaches" at various times for many years. She ceased to menstruate in 1873, ten years ago. About that time she began to notice an unusual throbbing in the region now occupied by the tumor, which was accompanied by a ringing in the ear of that side. Becoming accustomed to these conditions, for the next few years she paid little or no attention to the malady. About four years ago she began to have a left hemiparesis, which has often

seriously interfered with her comfort. Within the last two years, and especially within the last four months, the swelling has markedly increased, and the pain of the neuralgia has been commensurate with the growth of the tumor and pressure upon the neighboring nerves. In this emergency she consulted my friend Dr. R. C. M. Page, who kindly directed her to me.

Naturally we expect an aneurysm. As you examine the tumor, be careful to make no forcible compression; not that it is painful, but dangerous. Aneurysm in the tract of arteries leading to the brain can not be too carefully handled. The dislodgment of a coagulum might lead to dangerous and fatal cerebral embolism.

Massage may be justifiable in aneurysm of the extremities, where clots may occlude the artery of exit and thus induce a cure of the disease, but it is a procedure attended with too great danger in the neck.

The diagnosis of this swelling is by no means easy. An enlarged tonsil, tumor of the parotid (a frequent seat of neoplasms), sub-maxillary or cervical abscess, fatty or other tumor in contact with the arteries, are complications which we must certainly consider. To the sight the tumor pulsates with the jump of the carotid. The pulsation of the tumor is synchronous with the radial pulse and cardiac systole.

To the feel it is soft, elastic, and when the pulsation comes it has a peculiar thrill or tremor. Inserting the finger in the mouth, the tonsil is felt to be normal, although projected inward by the swelling. With the finger of the other hand upon the tumor externally, the expansion of the tumor with the systole is in both directions. We therefore exclude a solid growth over the artery or an abscess which would pulsate in only one direction—that of least resistance. The exclusion of abscess or other cyst is proved by the aneurysmal thrill. Since we conclude it to be an aneurysm, which artery is involved? The vertebral, internal carotid, or external carotid, or one of its branches? Aneurysm of the vertebral artery is extremely rare, and is almost always if not wholly of traumatic origin. There is a scar just over the posterior border and upper part of the sterno-mastoid muscle, which suggests a wound, but the patient says it was caused by a burn in her childhood, and that she is positive she has never had a penetrating wound of the neck. This is a strong argument against vertebral aneurysm.

Pressing my thumb firmly upon the common carotid, which is pushed against the cervical spine, the pulsation in the aneurysm ceases. If the vertebral were involved, all the pressure possible at this point would not affect the pulsation in the tumor, since the transverse processes effectually protect it from pressure.

The aneurysm belongs, then, to one of the terminal carotids, and since it is deeply situated, pulsating more perceptibly in the pharynx than externally, and since the pulsation in the facial is as strong on this as the other side, I conclude that the internal carotid is involved. I propose now to tie the internal carotid, if enough sound artery can be found between the aneurysm and the primitive trunk; if not, I will tie the common carotid at the crossing of the omohyoid, the external carotid below the origin of the lingual, and the superior thyroid before it gives off the hyoid

* This account is given in the words used by me before the surgical class at the Polyclinic, where the case was made the subject of a clinical lecture.

or mastoid branches. In this way the circulation in the sac will be arrested, excepting that which may occur through the circle of Willis.

Upon exposing the bifurcation of the common carotid and examining the first portion of the internal carotid, I discover that the seat of the aneurysm is in the course of the internal trunk, and that it will not be safe to tie this trunk. I therefore place a large thymolized catgut ligature around the external carotid, one fourth of an inch above the bifurcation and the same distance below the origin of the lingual. When I tighten the ligature, which I shall not do until the common carotid is secured, I do not intend to divide any tunic of the artery, but simply to draw it tight enough to occlude the vessel and hold it so until permanent occlusion results from the inflammation caused by the ligature, which inflammation produces proliferation of the endothelia and other protoplasm-making cells. This process alone leads to occlusion.

The ligature which I pass around the common trunk is the sciatic nerve taken from a calf about two months old. It has been kept one year in five-per-cent. carbolic-acid solution. It is about three millimetres (one eighth of an inch) in thickness. Drawing the loop until pulsation in the tumor ceases, a double knot is made; the two ends of the nerve are then tied with a small catgut, to prevent slipping, cut off, and left in the wound.

The ligature around the external carotid is next tied, and, lastly, that around the superior thyroid. The ends are cut off one fourth of an inch from the knots, and the wound is thoroughly washed with a five-per-cent. carbolic solution; a drainage-tube is inserted, which leads from the deepest to the most dependent point. The wound, with the exception of the lower angle, where the drainage-tube makes its exit, is closed with catgut sutures. Eight or ten layers of carbolized gauze, held in place by a gauze bandage around the head and neck, complete the dressing.

Carbolized, broad, tape-like animal ligatures have lately been introduced into surgery and used with invariable success, the credit of which is due to the distinguished English surgeon, Mr. Richard Barwell. This gentleman has tied a number of the larger arteries with ox-aorta ligatures. I know of no one who has used nerves for ligatures in operating upon human beings excepting myself. I have tied the carotid once before in this manner, and successfully.* One other carotid and one subclavian, with the ox-aorta, complete the record of my experience with the broad animal ligatures. Experiments upon animals with these ligatures have satisfied me that they are reliable and safe.

[NOTE.—The subsequent history of the case is short. The wound healed quickly, discharging a small quantity of pus through the drainage-tube. The pulsation in the aneurysm ceased entirely on the eighth day after the operation. The patient was able to go out of doors in the fourth week. There were no alarming symptoms developed. No hæmorrhage. The aneurysm, which was about one by two inches in diameter, has diminished in size until it is scarcely appreciable. The patient is perfectly well, and has not had a hemierania since the operation.]

* "Archives of Medicine," New York, June, 1882.

A CONTRIBUTION TO THE TREATMENT OF CLUB-FOOT.

BY CHARLES F. STILLMAN, M. D.,
NEW YORK.

THERE has been a want in surgery for a light and effective apparatus for weak ankles when associated with inverted feet, for the less severe forms of talipes varus, especially when due to infantile paralysis, and for the after-treatment of such cases as have been subjected to operation. There are three tendencies in the deformity which should be combated by such an instrument in order to render it effective as a curative agent.

These are, 1, adduction, or local inversion at the ankle; 2, supination, or turning under of the foot, the ankle giving way externally; and, 3, contraction of the posterior muscles by which the os calcis is drawn upward, thus forcing the astragalus forward and causing prominence of the metatarsal bones on the dorsum of the foot.

When a case presenting these symptoms comes to the surgeon, it is generally passed over to the instrument-maker, who supplies a simple, heavy, retentive brace (see Fig. 1), with a strip passing up each side, which makes no provision for the first and third symptoms at all, and only partially succeeds in overcoming the second, while its unnecessary weight is detrimental (due to the presence of the extra strip on the inside of the ankle), in paralytic cases especially; or, perhaps, the patient may be provided with a "Hudson"

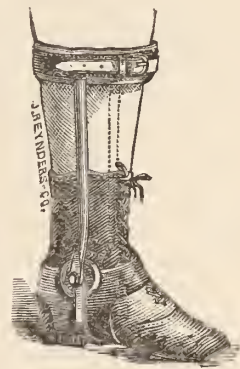


FIG. 1.

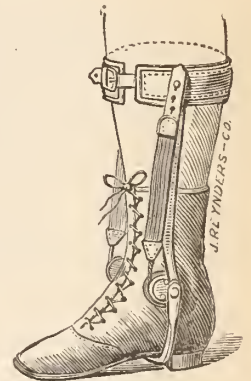


FIG. 2.

brace (Fig. 2), recommended by Dr. Sayre,* which fulfills the second and third indications partially and the first not at all, and possesses the same demerit of weight.

It would seem, with an elastic strap on each side, that the third indication would be fully met by this brace, but this is to some extent defeated by there being no provision whatever for the production of local eversion of the foot, it being rigidly secured in the median line between the two side-strips. Where any foot is outwardly rotated as far as possible, it is thereby placed in the position in which the origin and insertion of the peronei muscles are most nearly approximated, and in this position the elastic force operates to best advantage in lifting the heel, because, if the foot is held at its extreme outward angle with the leg (extreme

* "Orthopædic Surgery and Diseases of Joints," Lewis A. Sayre, 1883, p. 161.

eversion), and is seized under the ball and pushed upward, the metatarsal bones and astragalus will be replaced in position, leaving no prominence on the dorsum whatever, and the os calcis will be pushed back by the astragalus, thus causing a direct reversal of the process of the deformity; a result which can not be attained if the foot be held in the median line, as by the "Hudson" brace. There should be provision in the brace for outward lateral movement or eversion, as this is necessary for correct physiological treatment. To avoid weight, I use one side-strip instead of two, and that is placed externally, is articulated opposite the ankle, is riveted to the shoe beneath the arch, or to a metal insole if concealment be desired, and attached by two girths to the leg, one just below the knee and the other above the ankle, so that the muscular portion of the leg is not constricted or encumbered (see Fig. 3).

When a side-strip is worn on the inner side of the leg, it is apt to interfere with locomotion, leading to frequent falls, a result to be avoided by having it placed externally only—as in those being described. In order to fulfill the three indications already given, the single side-strip just described is to be fitted with two ratchets and an elastic strap. These ratchets are clamps, as shown in Fig. 3, and were de-

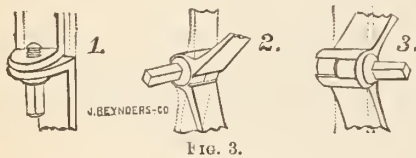


FIG. 3.

scribed by me in the New York "Medical Record," as admitting either fixation at any angle or free motion. In this case we use them for fixation in preference to any other ratchet, both for symmetry and for ease of fabrication, the latter being an important item in the expense attending a brace.

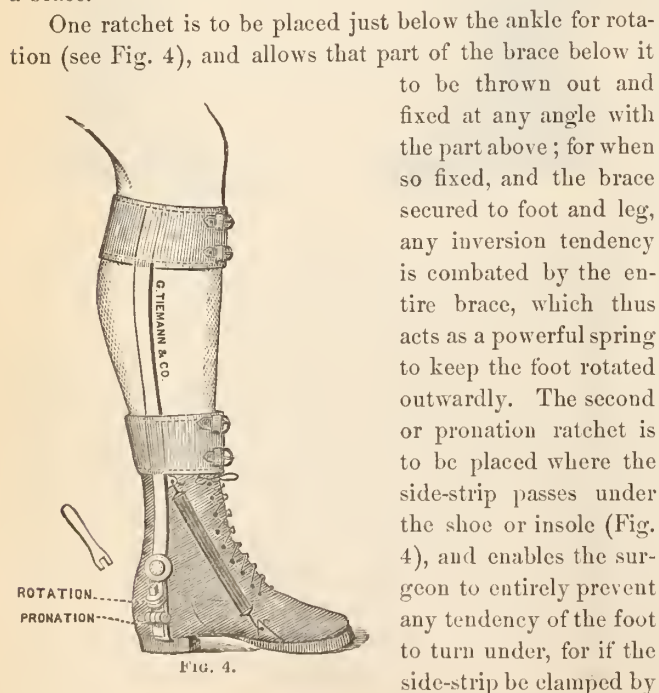


FIG. 4.

it at an angle of about 45° outward from the foot, and then brought up against the leg, and secured by the girths,

the foot will be turned in its long axis so that the patient will walk on the inner instead of the outer side. This effect may be varied by the ratchet in the side-strip, so that the brace may be anything from a simple vertical support to an agent for the production of valgus, so completely does this ratchet place the limb under the control of the surgeon.

The third and last indication is combated by the use of elastic webbing, provided with hooks, passing from an eyelet in the sole opposite the base of the little toe to a point on the side-strip at about the lower girth.

The rubber webbing is preferred to the rubber cord, as used by Sayre, on account of its durability, and because the cord is apt to wear through over the ball of the foot, necessitating frequent renewal.

We thus, by means of this brace, place the foot in a position to properly receive the weight of the body, and, if it is so received, the weight becomes an agent for the permanent cure of the deformity, tending to press the foot into normal shape; but if, instead of being rotated outward, the foot received this weight while inverted, or in the median line, the deformity would be increased.

In many cases it may seem preferable to allow a limited range of lateral movement of the foot, instead of having the eversion fixed by the clamp.

This may be secured by having a loose rotary joint, and attaching a coiled spring to the side-strip, whose power can be regulated by a cog and catch, so that it may be "wound up" to any desired degree of rotary power, thus combating the inversion by a constant elastic force, without impairing support.

By either of these forms of apparatus we can mechanically combat any of the simpler forms of deformity presenting the symptoms detailed in the commencement of the paper; and for the after-treatment of club-foot which has been subjected to operation they fulfill every indication.

The physiological point to which I wish to draw attention is the necessity of rotating the foot outward (extreme eversion) before applying elastic force, if complete reduction of an equino-varus or an equinus be desired. Whenever, in these conditions, the os calcis is drawn upward and the astragalus projects, it is impossible to apply the upward elastic force advantageously in the median line until the foot is rotated outward, as the partial dislocation of itself prevents the normal degree of movement upward in the ankle joint. The foot should be taken in the hands of the surgeon and forcibly everted, and, after passing the median line, pronated; and it will then be found that the deformity can be relieved with much greater ease. It therefore follows that a brace, to be effective, should contain provision for these movements, and afterward afford fixation in the corrected position while not interfering with the normal

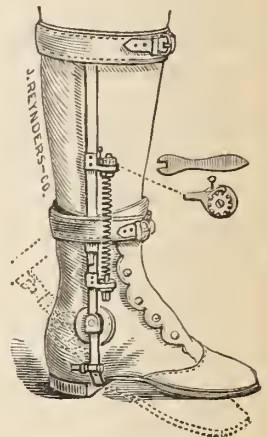


FIG. 5.

motion of the ankle, and that braces have not done so in the past may perhaps be argued as one of the reasons why so many cases have been relegated to tenotomy, only to have the relief thus obtained often followed by relapse and an unsuccessful termination.

FLORENCE HOUSE, EIGHTEENTH STREET AND FOURTH AVENUE.

CASES IN GENITO-URINARY PRACTICE.

By H. RAPHAEL, M. D.,

ATTENDING PHYSICIAN FOR DISEASES OF THE GENITO-URINARY ORGANS AND
SYPHILIS, BELLEVUE HOSPITAL, OUT-DOOR DEPARTMENT.

Gonorrhœa with Ulceration of the Neck of the Bladder, of Four Months' Duration, cured by Blisters to the Perinæum.—Irritability of the Bladder due to a Neurosis.

CASE I. GONORRHŒA WITH ULCERATION OF THE NECK OF THE BLADDER, OF FOUR MONTHS' DURATION, CURED BY BLISTERS TO THE PERINÆUM.—M. H., aged twenty-eight, single, cashier in a banking-house, had his first sexual intercourse on December 28, 1881, and another on January 2, 1882. Three days after his second sexual intercourse he began to feel pain and a burning sensation on urinating. He immediately applied to his physician, who, on examining him, told him that it was the commencement of a gonorrhœa. The patient took the usual remedies for that disease, at first alkalies, and, when the inflammatory symptoms had subsided, injections of sulphate of zinc were ordered. The discharge soon diminished, but suddenly retention of urine set in, with intense pain in the perinæum, and, on examination, the physician said it was due to inflammation of the right seminal vesicle. A consultation with a prominent specialist in genito-urinary diseases was had, who confirmed the diagnosis, and recommended a plan of treatment appropriate for the complication. The urine had to be drawn off by the aid of a catheter for several days, the patient being unable to empty his bladder. He gradually improved, but about February 1st there was a recurrence of the retention of urine, with pain in the region of the neck of the bladder and perinæum, requiring the use of the catheter three times daily as before, and, upon examination, his physician found that the left seminal vesicle was now inflamed and swollen, the right being apparently in a normal condition. Under treatment directed to this complication the patient improved somewhat, but on March 20th he began to suffer from frequent and painful micturition, requiring him to urinate every forty or forty-five minutes, the urine at the same time being loaded with pus, mucus, and some blood, the latter fluid and clotted. The pains were intense, especially toward the end of urinating, when a few drops of bloody urine and coagula were expelled, producing a flushing of the patient's face from nervous excitement, accompanied by throbbing and heaving of the penis and whole perineal region. To mitigate these excruciating pains, the patient was obliged to take morphine regularly every four hours. In the absence of his regular consulting physician, another eminent specialist was consulted, but

this gentleman was not disposed to agree to the diagnosis of the first consulting and attending physician; a third specialist in genito-urinary diseases was called in, and he pronounced it a case of ulceration of the neck of the bladder, for the relief of which the patient was ordered to take calcium sulphide and to continue the use of the morphine for the relief of the pain, prognosticating the patient's recovery in about three weeks' time. At the expiration of that time, however, the patient was still in the same condition, and it was now proposed by his consulting physicians to perform an operation for the cure of the complaint, the operation to consist of puncture of the bladder per rectum and the introduction of a drainage-tube. This operation the patient refused to submit himself to.

I first saw the patient on May 2, 1882, who had now been ill for nearly four months, and his condition was as follows: He was obliged to urinate every forty or forty-five minutes; each act was preceded, accompanied, and followed by intense pains, notwithstanding he was under the influence of morphine, taking ten drops of Magendie's solution regularly every four hours. The urine was thickly loaded with pus, mucus, and blood, the blood being fluid and clotted; often long, stringy clots were expelled, followed always by prolonged throbbing of the penis and perinæum, flushing of the countenance, and general nervous excitation. His general condition was poor, his appetite bad, and his sleep much disturbed by the pain and frequency of micturition. On examination per rectum I found a tender and painful spot in the region of the neck of the bladder; there was also pain on pressure of the bladder over the pubes. The introduction of a gum-elastic bougie caused pain as soon as the tip of the instrument entered the membranous portion of the urethra; the urine was highly alkaline in reaction. Altogether I felt that there could be no doubt that it was a case of ulceration of the neck of the bladder. I immediately applied a blister over the patient's entire perinæum, and before it had entirely healed I put on another over the same spot. The patient was put on a milk diet exclusively, and I ordered him, in addition, to take carbonate of magnesium, with the result of causing the blood to entirely disappear from his urine by the third day after the application of the first blister. The patient was now able to hold his water for two hours without inconvenience, and to void it with but little pain. On the fourth day he gave up taking morphine, and urinated only every three hours, the urine being free from blood and containing only a small quantity of sediment. On the sixth day he was able to hold his water for four hours, and joined his family at dinner, and in another week he was so far recovered as to be able to start on an extended trip with one of the members of his firm for the far West, and since then has enjoyed excellent health.

CASE II. IRRITABILITY OF THE BLADDER DUE TO NEUROSIS.—D. K., merchant, aged thirty-five; married, father of four children; never had any genito-urinary disease; pale, and of a nervous temperament. About a year before he consulted me he began to suffer from inability to hold his water. At first he could hold his water for about two hours, but of late he was obliged to empty his bladder every

half-hour; at night he micturated only every two hours. In hot or warm days he could hold his water for a longer period. A careful examination failed to detect either stone in the bladder, hæmorrhoids, or any abnormality of the urine. His general condition was quite fair, and, aside from this complaint, he enjoyed pretty fair health. He had been under treatment for this complaint for nearly a year, which, by the advice of his physician, consisted mainly of a dose of morphine night and morning. Upon closer inquiry, the patient stated that he had suffered from sciatica some two years ago. I considered his case as a simple neurosis of the bladder, and gave him three drops of Fowler's solution and three grains of quinine three times daily for a week, at the end of which time he reported that he was entirely free from his complaint.

Book Notices.

A System of Surgery. Theoretical and Practical, in Treatises by Various Authors. Edited by T. HOLMES, M. A. Cantab., Surgeon to St. George's Hospital, etc., and J. W. HULKE, F. R. S., Surgeon to the Middlesex Hospital, etc. Third edition, in three volumes, with illustrations. New York: William Wood & Co., 1883. Pp. xxxi-1,109; xxiv-964; xxix-942.

Third Notice.

THE third volume begins with a chapter on the Diseases of the Absorbent System, edited by Holmes from the work of the late C. H. Moore. It is short, as such a chapter must necessarily be, and we fail to find any notice of lymphangiectasis or lymphangioma. The chapter on Diseases of the Arteries is by the same author, and is equally short, including atheroma, acute arteritis, and occlusion from embolism or thrombosis. The well-known and admirable chapter on Aneurysm, by the editor, covers the next 125 pages of this volume, and needs little or no comment. On the questions of treatment which have arisen since the last edition, it has been brought fully up to date.

Diseases of the Veins, originally by the late Mr. Callender, has been thoroughly revised by the editor, and under this heading we find phlebitis, hypertrophy and atrophy, and varicosities. Diseases of the Urinary Organs, Calculus in the Male, Lithotomy, Lithotripsy, and Calculus in the Female, are all from the pen of Sir H. Thompson, while a general chapter on Urinary Deposits and Calculi, by the late A. Poland, has been rewritten by W. F. Donkin. The kidney is included, and some very valuable matter has been introduced relating to its diseases and the operations of nephrotomy, nephro-lithotomy, and nephrectomy. Among the Diseases of the Bladder we find a special article on Thompson's method of digital exploration through a perineal incision, and the articles on the prostate and urethra are both very rich in practical matter. The chapters on Lithotomy and Lithotripsy embody the full experience of their author.

The two chapters on Venereal Diseases are by Henry Lee, and are quite richly illustrated with colored plates. Besides the ordinary matter found under this head, the author has devoted considerable space to such questions as "primary syphilitic inoculation without ulceration," lymphatic absorption, inoculation modified by previous disease, twofold inoculation, and the hereditary transmission of the disease.

The Surgical Diseases of Women is from the pen of J. Hutel-

inson, and deals only with the major surgical procedures, such as the operations of laparotomy, ovariectomy, the treatment of cancer, and of vesico-vaginal fistula and ruptured perineum. More space is given to Birkett's article on Diseases of the Breast than to Diseases of Women, and it is correspondingly fuller, several pages being devoted to the anatomy, principles of diagnosis, and general therapeutics before beginning on the diseases proper.

The essay on Diseases of the Male Organs of Generation, by G. M. Humphrey, rewritten by Jacobson, is one of the largest in the book, and one of the most complete. The authors seem to have aimed at omitting nothing relating to the testis, and the result is a most comprehensive and valuable *résumé* of all our knowledge on this subject compressed into a convenient form for ready reference. The article on Hydrocele is equally complete, and a few pages are given to self-abuse, spermatorrhœa, and impotence, with the malignant diseases of the penis.

The chapter on the Thyroid Gland, by Howard, is almost too condensed to be satisfactory. The chapter on Anæsthetics is by Lister, and is divided into three portions, one written in 1861, one in 1870, and one for the present edition. He publishes his own case of death from chloroform, but he holds to the use of that agent still. The article on Minor Surgery has been rewritten by Lyell, who also contributes the following one on Plastic Surgery. This latter is very complete, and the idea of embodying these operations in a separate article seems to be an exceedingly good one. Not only are the operations on the face described and figured in full, but also those on the bladder and penis, the operations for contracted cicatrices, and the best methods of skin-grafting.

The article on Amputation, by Lister, has been supplemented by one on Artificial Limbs by W. Watson Cheyne, in which many ingenious devices are figured; and the work proper closes with the editor's essay on Excision of Bones and Joints. But, that nothing of any importance might be omitted, an Appendix of more than a hundred pages of fine type has been added, including Surgical Diseases of Children, Congenital Dislocation and Intra-Uterine Fracture, Rickets, Osteotomy at the Hip, Knee, Leg-bones, and Radius, Apnoea (Asphyxia), Parasites, Venomous Insects and Reptiles, Surgical Diagnosis, and Regional Surgery, by such men as Holmes, Busk, Harley, Little, and Brodhurst. Some of the most valuable matter in the book is to be found in this appendix. The work closes with forty pages of index.

We have tried thus, in the briefest manner possible, to give the reader a general idea of the contents of this great work, and of the changes to be found in this edition. The length of time required for a mere enumeration of the contents is an indication of the amount of matter to be found in these three thousand pages of closely printed text. When we say that the book in this edition once more steps into the place it occupied twelve years ago, before more recent publications had left it behind, we say all that needs to be said. Holmes's "Surgery" is still the surgery it was in our student days, when the expense of the five volumes was the only thing which kept every student from owning a copy; and Mr. Holmes has admirably succeeded in the task of bringing the work up to date. It has been our pleasant task during the past few months to welcome several important works of this kind in the columns of this journal. Ashhurst, Gross, Agnew, and Holmes have each seemed all that could be desired as a text-book. To choose between them would be an unnecessary if not a thankless task. All are good—wonderfully good, and should we be asked by the student which to buy, we should simply say buy as many of them as possible. No library is complete without them all, and in them all is contained everything in modern surgery.

A History of Tuberculosis, from the Time of Sylvius to the Present Day. Being in part a translation, with notes and additions, from the German of Dr. Arnold Spina. Containing also an account of the researches and discoveries of Dr. Robert Koch and other recent investigators. By ERIO E. SATTLER, M. D. Cincinnati: Robert Clarke & Co., 1883. Pp. 191.

THIS little book, the real title of which can not be inferred from an examination of the cover, will be likely to attract some attention, because Spina (and some have intimated that it is Stricker speaking through him) has been acknowledged to be one of the most formidable opponents with whom Koch has had to contend while arguing for the validity of the results of his studies and experiments with reference to the bacillus of tuberculosis. The first five chapters contain an account of the theories which, from time to time, have been put forth concerning the pathological anatomy and histology of tubercle. It appears that Sylvius was the first to publish on this subject, and his contribution came forth in 1680. From that date down to the present, tubercle has been a pathological center around which opinions have circled like fashions around women's headgear, and, as it would seem, still there are more to follow. To these chapters containing the views of various observers on this perplexing question Dr. Sattler has added two, in which are given the history of Koch's investigations, together with the experiments of other investigators, Spina's latest experiments with reference to Koch's doctrine, and, finally, Koch's reply to Spina's criticism. The aim of Dr. Sattler has been to furnish a condensed and exhaustive review of the most important literature of this subject, and he has succeeded very well indeed.

Suprapubic Lithotomy. The High Operation for Stone—Epicystotomy—Hypogastric Lithotomy—(The High Apparatus). By WILLIAM TOD HELMUTH, M. D., Professor of Surgery in the New York Homœopathic Medical College, etc. Illustrated with eight lithographic plates and numerous engravings on wood. New York and Philadelphia: Boericke & Tafel, 1882. 4to, pp. 93. [Price, \$4.]

DR. HELMUTH tabulates 405 reported cases of suprapubic lithotomy, showing the rates and causes of mortality, the size of the stone, and the results of the operation. These include four cases of his own, which are reported minutely. The writer is convinced that epicystotomy "will, before many years have passed, receive a high place among all *cutting* operations for stone in the bladder, especially in those cases in which litholapaxy is inappropriate."

An interesting series of experiments is described, intended to show the position of the bladder-peritonæum, and the amount of suprapubic space available for the operation. A full account is given of the method of performing the operation, describing minutely its various steps as well as the instruments required.

In appearance, the book is, perhaps, a trifle showy for a scientific work, as though intended rather for the center-table than for the shelves of a library.

BOOKS AND PAMPHLETS RECEIVED.

The Medical Student's Manual of Chemistry. By R. A. Witthaus, A. M., M. D., Professor of Chemistry and Toxicology in the University of Buffalo, etc. New York: William Wood & Co., 1883. Pp. xi-370.

The Physiological Factor in Diagnosis. A Work for Young Practitioners. By J. Milner Fothergill, M. D., Physician to the City of London Hospital for Diseases of the Chest, etc. New York: William Wood & Co., 1883. Pp. 256.

A Guide to American Medical Students in Europe. By Henry Hun, M. D., Lecturer on Diseases of the Nervous System in the Albany Medical College. New York: William Wood & Co., 1883. Pp. vi-151.

L'année médicale (cinquième année), 1882. Résumé des progrès réalisés dans les sciences médicales. Publié sous la direction du Dr. Bourneville, médecin de l'hospice de Bicêtre, etc. Paris: E. Plon et cie., 1883. Pp. vi-462.

Caso di Spina Bifida Lombare Trattato e Guarito mediante la Legatura Elastica, con Alcune Osservazioni sull' Anatomia Patologica e sulla Patogenesi di quest' Affezione. Dell Dottore Vittorio Cavagnis. [Reprint from the "Annali Universali di Medicina."]

A Manual of Pathology. By Joseph Coats, M. D., Pathologist to the Western Infirmary and the Sick Children's Hospital, Glasgow, etc. With three hundred and thirty-nine illustrations. Philadelphia: Henry C. Lea's Son & Co., 1883. Pp. xxi-19 to 818, inclusive.

Chemistry: General, Medical, and Pharmaceutical, including the Chemistry of the U. S. Pharmacopœia. A Manual on the General Principles of the Science, and their Applications in Medicine and Pharmacy. By John Attfield, F. R. S., etc., Professor of Practical Chemistry to the Pharmaceutical Society of Great Britain, etc. Tenth edition, specially revised by the author for America. Philadelphia: Henry C. Lea's Son & Co., 1883. Pp. xvi-13 to 727, inclusive.

Insanity Considered in its Medico-Legal Relations. By T. R. Buckham, A. M., M. D. Philadelphia: J. B. Lippincott & Co., 1883. Pp. 265.

A Pharmacopœia of Selected Remedies, with Therapeutic Annotations, Notes on Alimentation in Disease, Air, Massage, Electricity, and other Supplementary Remedial Agents, and a Clinical Index; arranged as a Hand-book for Prescribers. By Edmund A. Kirby, M. D., M. R. C. S. E., late Physician to the City Dispensary. Sixth edition, enlarged and revised. Philadelphia: E. Blakiston, Son & Co., 1883. 4to, pp. 134. [Price, \$2.25.]

Fifth Annual Report of the State Board of Health of Kentucky, 1883.

Transactions of the Medical and Chirurgical Faculty of the State of Maryland, Eighty-fifth Annual Session, held at Baltimore, April, 1883.

Proceedings of the Connecticut Medical Society, 1883.

A Contribution to the Treatment of Empyema. By A. T. Cabot, A. M., M. D., Surgeon to Out patients at the Massachusetts General Hospital, etc. [Reprint from the "Boston Medical and Surgical Journal."]

Health Notes for Students. By Burt G. Wilder, M. D., Professor of Physiology, etc., in Cornell University and the Medical School of Maine. New York: G. P. Putnam's Sons, 1883. Pp. 58. [Price, 20c.]

Incineration. By John D. Bengless, President of the New York Cremation Society. [Reprint from the "Princeton Review."]

Diagnosis of Ovarian Tumors. Lectures delivered by Edward Borek, A. M., M. D., etc. St. Louis, 1883. Pp. 16.

Transactions of the Medical Association of Georgia. Thirty-fourth Annual Session, 1883.

Transactions of the Colorado State Medical Society, at its Thirteenth Annual Convention, held in Denver, June, 1883.

Transactions of the American Otological Society, Sixteenth Annual Meeting, 1883. Vol. III, part 2.

Results of Treatment of Injuries occurring at Parturition. A Paper read before the Maine Medical Association, June 13, 1883. By S. C. Gordon, M. D., of Portland. Portland, 1883. Pp. 11.

Medical Education and the Regulation of the Practice of Medicine in the United States and Canada. Illinois State Board of Health, 1883.

Cholera a Disease of the Nervous System. By John Chapman, M. D., etc. London: J. & A. Churchill, 1883. Pp. 3 to 8, inclusive.

London Water Supply. Report No. XXXI. By William Crookes, F. R. S., William Odling, M. B., F. R. S., F. R. C. P., etc., and C. Meymott Tidy, M. B., F. C. S., etc. London: Wertheimer & Lea, 1883.

Sixteenth Annual Announcement and Catalogue of the Medical Department of Howard University.

Eleventh Annual Catalogue of the University of Nebraska.

Western Reserve University, Medical Department. Announcement, 1883-'84.

Second Annual Announcement of the Hospital Medical College of Evansville, Ind.

Fourth Annual Announcement and Catalogue of the Northwestern Medical College of St. Joseph, Mo.

Thirty-sixth Annual Announcement of the Hahnemann Medical College of Philadelphia.

Correspondence.

LETTER FROM BOSTON.

The Celebration of the One Hundredth Anniversary of the Foundation of the Medical School of Harvard University, and the Dedication of its New Building.

Boston, October 17, 1883.

In a previous letter a description of the new building of the Harvard Medical School has been given. The exercises of dedication were to have taken place last June, but this arrangement was prevented by the fire which occurred at that time. Now no traces of the accident are visible on the inside, and it takes a close observer to detect any blemish to the substantial exterior, the beauty of the building not being marred in the slightest. The committee of arrangements who had the management of the dedicatory exercises were Dr. J. C. Warren, Dr. H. W. Williams, Dr. J. C. White, Dr. W. L. Richardson, and Dr. W. H. Baker, and it was in great part due to the earnest and hard work of these gentlemen that the exercises were so successfully carried out to-day. About six hundred special invitations were sent out to subscribers to the building fund, and to distinguished people at home and abroad; and a general invitation was given to physicians through the State, though admission was only obtained upon presentation of a ticket to attend the exercises and inspect the building, which was thrown open for the occasion, except the dissecting-rooms, which were closed out of respect to the feelings of the ladies present.

The literary exercises were held in Huntington Hall, Institute of Technology building. That portion of the hall directly behind the center of the stage was heavily draped with red plush, which served as a background for the three-quarter portrait of Professor Oliver Wendell Holmes, and the bust of Professor Henry J. Bigelow, which were to be presented to the school.

The order of exercises was as follows: At Huntington Hall: Address by the President of the University; oration by Emeritus Professor Oliver Wendell Holmes; presentation of a portrait of Professor Holmes, by Dr. Francis Minot, in behalf of the donors; presentation of a bust of Professor Henry J. Bigelow, by Hon. Samuel A. Green, in behalf of the donors. At

the Medical College: Prayer by the Rev. Andrew P. Peabody, D. D.; dedication of the new building to the purposes of medical instruction; Addresses: President Charles W. Eliot, in behalf of the corporation; Professor Henry W. Williams, in behalf of the medical faculty; Henry Lee, Esq., in behalf of the donors; reception of subscribers to the building-fund and invited guests, by the medical faculty; exhibition of the building.

President Eliot traced the early history of the school, from the time when Dr. John Warren, Dr. Benjamin Waterhouse, and Dr. Aaron Dexter lectured in the basement of Harvard Hall and in a portion of the little Holden Chapel at Cambridge, down through its gradual growth to the present time, when its corps of instructors numbers forty-seven. He alluded to the admission examination, the advantages of the graded course, and the voluntary fourth year of study.

Then followed Dr. Holmes's address, which was the feature of the day. Never before has Holmes appeared to such advantage. In the course of the address, which was largely historical, he paid a glowing and deserved tribute to the achievements of the emeritus professor of surgery, Dr. Henry J. Bigelow. Another noteworthy feature of the address was the witty way in which the speaker threw ridicule, and at the same time censured, on the present Governor of the State for his exploits in attempting to arouse the wrath of the ignorant and the unthinking against the practical study of anatomy. The serious results to which such a stirring up of the dregs of society might lead were also dwelt upon, the burning of the great Alexandrine Library being held up as a warning.

Dr. Francis Minot, in presenting Professor Holmes's portrait, said:

Many alumni of the school, together with some of its present students, have desired that a permanent memorial of their beloved teacher, Professor Oliver Wendell Holmes, should be placed in the new college building, in token of their gratitude for the great services which he has rendered to many generations of his pupils. By his eminent scientific attainments, his sound method of teaching, his felicity of illustration, and his untiring devotion to all the duties of his chair, he inspired those who were so fortunate as to come under his instruction with the importance of a thorough knowledge of anatomy, the foundation of medical science. In the name of the alumni and students of this college, I have the pleasure of presenting to the medical faculty a portrait of Professor Holmes, to be placed in the college in remembrance of his invaluable services to Harvard University, to the medical profession, and to the community.

The Hon. Samuel A. Green, in behalf of the donors, presented the bust of Professor Bigelow. He said:

The pleasant duty has been assigned me, Mr. President, of presenting to you, as the head of the Corporation of Harvard College, in behalf of his many friends, this animated bust of Professor Henry J. Bigelow. The list of subscribers comprises many names, and includes nearly all the surgeons of the two great hospitals in this city; several gentlemen not belonging to the medical profession, but warm personal friends of Dr. Bigelow; a few ladies who had been his patients; and all the surgical house-pupils who had been connected with the Massachusetts General Hospital during his long term of service at that institution, so far as they could be easily reached by personal application. The bust is given on the condition that it shall be placed permanently in the new surgical lecture-room, which corresponds to the scene of Dr. Bigelow's long labors in the old building. It has been made by the eminent sculptor, Launt Thompson, of New York, and is a most faithful representation of the distinguished surgeon. It outlines with such accuracy and precision the features of his face, and the pose of his head, that nothing is wanted, in the opinion of his friends, to make it a correct likeness.

I need not in this presence of this audience name the various steps by which Dr. Bigelow has reached the high position which is conceded to him as freely and fully in Europe as it is in America; but I can not

forbear an allusion to some of his original researches. His mechanism of the reduction of a dislocated femur by manipulation was a great discovery in surgical science, and follows as a simple corollary on the anatomical facts which he has so clearly and minutely demonstrated. His operation of rapid lithotripsy has deprived a painful disease of much of its terror, as well as of its danger. Nor should I overlook on this occasion his quick and ready discernment of the importance of Dr. Morton's demonstration of the use of ether as a safe anæsthetic, which took place at the Massachusetts General Hospital in the autumn of 1846. The discovery of this greatest boon to the human family, since the invention of printing, was fraught with such immense possibilities that the world was slow to realize its magnitude; but by the clear foresight and prudent zeal of Dr. Bigelow, shown in many ways, the day was hastened when its use became well-nigh universal.

Dr. Bigelow has filled the chair of surgery in the Harvard Medical School for thirty-three years, a period of professional instruction that rarely falls to the lot of any teacher, and he now leaves it with the honored title of professor emeritus. During this long term of service he has taught, through his lectures, probably not fewer than eighteen hundred students who have graduated at the Medical School, and, perhaps, seventy-five hundred more who have taken their degrees elsewhere; and by these thousands of physicians, now scattered throughout the land, those of them who survive, Dr. Bigelow is remembered as most eminently a practical teacher. Active in his profession, clear in his instruction, and enthusiastic in his investigations, he always had the happy faculty of imparting to his students a kindred spirit and zeal. *Haud inciperet loquor.*

At the close of these exercises the invited guests went at once to the new Medical School, where the Rev. A. P. Peabody, D. D., offered the dedicatory prayer, consecrating the building to science, humanity, and charity, to Christian tenderness and love, and to all the ministries that can enrich humanity.

President Eliot then said: "In behalf of the President and Fellows of Harvard University, and of the Medical School, I declare this building to be devoted to medical science and the art of healing."

After further addresses by Professor Henry W. Williams and Colonel Henry Lee, a reception was given by President Eliot and the faculty to the subscribers to the building fund, and an elaborate collation was served. The floral decorations were numerous and beautiful.

In the evening the medical faculty gave a dinner at Young's to the invited guests.

LETTER FROM WASHINGTON.

The late Surgeon-General Crane.—The Question of his Successor.—The Surgeon-General of the Navy.

WASHINGTON, October 13, 1883.

YOUR issue of this date, which has just reached me, well expresses the sympathy of the medical profession here with their *confrères* of the army on the occasion of the death of Surgeon-General Crane. I will refrain from enlarging on the circumstances of his last illness; the one central fact that he is now no more is what we have to face. To say his loss is felt with unalloyed regret is something—indeed, very much—more than to utter a graceful sentence. It is not custom and propriety alone that dictate it; it reflects a genuine feeling, and one that is, I believe, universal among those who knew him, as well as among the medical corps of which he was the chief.

That another vacancy has occurred so soon in the office of surgeon-general perhaps stimulates the speculation that is never slow to mingle with our sense of bereavement—the query as to the succession. Even this republican country never fails on such an occasion to catch the spirit of the paradox, *le roi est mort, vive le roi!* and here in Washington, as everybody knows, not only pure politics, but all that pertains to the administration

of the various branches of the public service, is most continually in the minds of the people. It is no wonder, therefore, that, while yet the fact of General Crane's death has scarcely had time to meet with perfect realization, gossip is found to turn upon the question of his successor.

There are several men whose names are high in the list concerning whom it may safely be said that their appointment would prove acceptable to the army, and it is gratifying to observe the general feeling of confidence that no unworthy choice will be made.

Bargaining and corruption have seldom cropped out in the management of our military affairs, and it is felt that in this instance there will be no exception to the rule. Without stopping to discuss the question of whether or not seniority should be rigidly followed in such a matter, it may not be out of place to call attention anew to the good results that have been the consequence of the contrary policy in the case of the navy. Prominent among the men who are named as likely to succeed General Crane are the assistant surgeon-general, Colonel Robert Murray, now on General Hancock's staff, and Colonel J. H. Baxter, on duty here as chief medical purveyor. Among the four remaining colonels in the medical corps, the only other whose name I have heard mentioned in this connection is Colonel Charles Sutherland, the present medical director of the Division of the Pacific.

Of all these gentlemen, I hear Colonel Baxter most spoken of, and I am inclined to think that, on the whole, his succession to the office would be most acceptable. Certainly, his high social position would prove a tower of strength to the medical corps in case his appointment should be decided upon. Perhaps such an occurrence would be doubly gratifying to the profession at large, since it would seem like a piece of retributive justice to offset the insult to which he was subjected by the most audacious of the medical men who were in attendance upon the late President Garfield during his last illness, and like a fitting recognition of the manliness displayed by Colonel Baxter in foregoing the satisfaction he might have derived from publishing certain facts that were abundantly verified in regard to the circumstances under which the insult was given.

Turning from the army to the navy, I am reminded, as doubtless few of your readers need be, that Surgeon-General Wales's term is drawing to a close, and that, in all probability, a determined effort will be made by a number of malcontents to defeat his reappointment. It is on every account to be hoped that this opposition will turn out to be as impotent as it is impudent, for no one can deny that the medical corps of the navy has occupied a more creditable position under Dr. Wales's administration than ever before. However, I feel sensible that there is a limit to your indulgence in the matter of space, and I will therefore defer to a subsequent communication what I might say under this head.

CHLOROPHYLL IN ANIMALS.—Some biologists have considered that chlorophyll in animals was due to the presence of minute parasitic algæ; but this view, entertained by German physiologists, is opposed to various considerations. Chlorophyll has been found in a diffused condition throughout all the tissues, and not merely in the form of little globules, which might be considered as independent organisms. Mr. McMunn read a paper at the British Association in which he defined chlorophyll as that coloring matter or mixture of coloring matters which can be extracted from green leaves by means of alcohol and ether. He had proved that this green coloring matter was present in the intestines of invertebrate animals, and the conclusion at which he arrived was that all the characteristic appearances of vegetable chlorophyll are present in animals, and that such pigments were synthetically built up by and in the bodies of animals.—*Lancet*.

THE
NEW YORK MEDICAL JOURNAL,
A Weekly Review of Medicine.

Published by
D. APPLETON & Co.

Edited by
FRANK P. FOSTER, M. D.

NEW YORK, SATURDAY, OCT. 20, 1883.

A QUARREL OVER THE MANAGEMENT OF A HOSPITAL.

It seems to be fated that in almost every hospital, sooner or later, the board of managers and the medical staff shall fall to quarreling. In most hospitals both these bodies are made up of intelligent and well-meaning men, and there seems to be no *a priori* reason why they should not work together harmoniously; nevertheless, an occasion for contention seems seldom lacking for any great length of time. While it must be acknowledged that the medical officers of hospitals, anxious to bring every appliance of their art into play in the prime work of healing the sick, are apt to fall into a chronic state of irritation at the prudence which denies them many of the agencies that are expensive—a prudence that they would rather term parsimony, and while it must also be admitted that they occasionally seek to rise above their proper function, and take a hand in the administration; still—and we say it not unmindful of our liability to be charged with partisanship—it is oftener the lay officials that forget their proper sphere, and for the time being lose sight of the fact that the chief object of the institution is to conduct disease to a favorable issue. The test of this statement is easy of application: at last, one of the two parties to any dispute of this sort has to yield the point. In the first instance, the doctors usually have to give way, because the power is vested in their opponents, but it is no uncommon thing for the latter eventually to confess themselves in the wrong by a reversal or a modification of their first decision. We think it susceptible of demonstration that the latter happens oftener than it fails to happen; and that is our test.

But, common as it is to find the lay power arrayed against the medical service, it is a rarity to encounter such a state of things as seems to obtain at present in the New York Infant Asylum, where, as is stated elsewhere in this issue of the journal, a chronic contention is going on in which manager opposes manager, and doctor opposes doctor. Such a spectacle is not uncommonly presented by institutions that are more or less fraudulent, but for a charity of the standing of the asylum in question it is almost an anomaly. Certainly, no one who feels any interest in the continued usefulness of the institution can fail to appreciate the misfortune that has overtaken it. The situation might, perhaps, be remedied within a reasonable period, were it practicable for outsiders to discern its merits; but the difficulty of doing so is rendered considerable by the fact that among the supporters of each side to the dispute are to be found both managers and medical officers on whose general sagacity, probity, and fair-mindedness the community has been accustomed to rely. We are inclined to think that the problem would be materially simplified if those who, in the present

juncture, may be called the opposition would consent to bury what may reasonably be looked upon as a dead issue—namely, the past acts of the President, Mr. Clark Bell. It might be left an open question whether those acts had been not only strained and unusual, but also arbitrary and of the nature of usurpations, as well as whether they were the outcome of mistaken but well-intended zeal, or of some other motive less pardonable—all this, we say, might safely be left to take care of itself in the future, and those who have, perhaps not without reason, felt aggrieved on those points might still rally to the rescue of the institution from the danger it stands in of forfeiting the confidence of the community.

Meantime, the action of the East Chester Board of Health strikes us as supremely absurd. The idea of recommending the Grand Jury to proceed against an institution of this sort simply on account of its death-rate is preposterous. As well might the Government be indicted, were that procedure possible, whenever a regiment is decimated by an epidemic. If there is any element of truth in what the board alleges, the asylum has doubtless recognized the necessity of heeding the moral before now, and legal proceedings should not be thought of until the contrary has been proved to be the case.

THE PORRO OPERATION.

DR. ROBERT P. HARRIS, of Philadelphia, has written voluminously and most instructively on the Cæsarean operation in its various modifications, as well as on a number of operative procedures that have from time to time been substituted for it. In his latest contribution, published in the October number of the "American Journal of the Medical Sciences," he seeks to rescue Porro's operation from the discredit that seems likely to be thrown on it by reason of its being confounded with certain operations that can not properly be regarded as modifications of the proceeding originally carried out by Professor Porro. He mentions no fewer than nine different procedures, as follows: 1. The true Porro operation, in which the stump of the cervix is secured in the abdominal wound. 2. Müller's modification, in which the uterus is drawn out through a long abdominal incision before being opened. 3. Müller's modification, the uterine section being made with a Paquelin's cautery. 4. The Müller modification with the constriction of the cervix effected by Esmarch's method. 5. The Porro operation, with the modification that the stump of the cervix is not secured in the abdominal wound, but is ligated and dropped. 6. Müller's modification intensified, so to speak, the uterus not being opened until after it has been entirely separated, the stump of the cervix being then treated as in Schroeder's method of abdominal myotomy. 7. The Porro method with the constriction effected after the manner of Esmarch, and the stump dropped. 8. "The Müller ablation; uterus not opened; stump secured in the abdominal wound." 9. Removal of the uterus and ovaries after laparotomy for rupture of the uterus.

Dr. Harris admits that the first four of these procedures may properly be classed as Porro operations, making Müller's modification, the so-called "Porro-Müller operation," a variety; but

he aims at simplicity by reducing the five other operations to three, namely: 1. "Puerperal utero-ovarian amputations with the pedicle dropped in." 2. "Premature ablations of the gravid uterus, the fœtus not being viable." 3. "Prévôt's operation," the last in the list of nine. To our mind, the number might be reduced still further to advantage, for, although Dr. Harris urges the distinction, we are unable to see why the fact of the stump being ligated and dropped should take a case out of the field covered by the term Porro's operation. It is argued that the fatality is greater in such cases, and that Porro's method should not be loaded down with their adverse statistics. This plea shows a commendable loyalty to Professor Porro's fame, but it seems to us illogical nevertheless. Moreover, the dropped-stump method may yet come to be the most successful, as has been the case with ovariectomy. While on this point, we can not refrain from the suggestion that some device may yet be hit upon by means of which a constrictor capable of being tightened from time to time shall be led down through the cervical canal and the vagina, thus doing away with the inconveniences of the clamp and the inefficiency of the ordinary ligature.

The two remaining classes—that in which a uterus that happens to contain a fœtus is removed for other purposes than as a means of delivery, and that in which it is removed as an incident in laparotomy done on account of rupture of the organ—we should exclude altogether from any connection with Porro's operation. It should be understood that the idea was not original with Porro, for the operation had been done on the lower animals many times before he carried it out on the human subject, but none the less is he entitled to whatever credit may come from any operation that has for its fundamental element the removal of the uterus by any means whatever, and with no matter what modifications in the steps of the procedure, as a supplement to the Cæsarean operation. Modifications that time shows to be of advantage should redound to the credit both of their inventors and of Porro, while those that prove useless or injurious will soon be dropped.

SIR ANDREW CLARK AND HIS CRITICS.

AMONG the features of American life that often lead to comment on the part of foreigners is the freedom with which our newspapers speak of individuals, and particularly of those of their affairs with which the public has little if anything to do. But this practice will soon cease to be peculiar to Americans, if any indication may be drawn from an article that lately appeared in the London "World." The article seems to be the eighty-sixth of a series with the general title of "Letters to Eminent Persons," and the particular article we allude to, signed "Kosmos," is addressed to Sir Andrew Clark, Bart., M. D.

It is not long since we chronicled Dr. Clark's elevation to a baronetcy, and on that occasion we quoted from the "Spectator" a remarkable piece of flunkeyism. Quite sharp is the contrast between the "Spectator's" vein and that which pervades the serio-comic homily in the "World"—serious in the liberties taken with a man who, whatever his social and professional distinction, can scarcely be said to be in politics; comic in the

ridicule it ingeniously casts on him under the guise of a good-natured analysis of his career. The "Spectator" affirmed that Dr. Clark was "undoubtedly quite at the head of his profession," but it was barren of any more specific commendation than a reminder of the service he had rendered "in persuading middle-aged men and women not to over-eat themselves [*sic*], and in showing them how much less food and wine and tea they ought to take."

"Kosmos" is not so amiable. He imputes Sir Andrew Clark's success to his knowledge of men, his tact, and his ability to counterfeit omniscience, remarking that the opportunity that made him was the occasion of his making an ingenious speech at the Mansion House when the cholera broke out in London, in 1866, before a meeting at which Mrs. Gladstone chanced to be present. He takes pains to remind Sir Andrew that he is not by any means a man who has done anything original in medicine, or shown himself to be a great physician; and then, after conceding that he has "played the part of a J. B. Gough or a Salvationist recruiting sergeant among the upper classes," quietly proceeds to knock the props from under whatever claim Dr. Clark may have made, or have allowed to be made in his behalf, to have acted on noble impulses in the matter, by hinting that at a certain period in his life he found it requisite for his own welfare to become a total abstainer, and that at a certain subsequent period he found that he could indulge in wine to some extent without detriment—wherefore he inculcated teetotalism for all the world at first, but afterward became more tolerant.

Whether or not such a sequence of events has really been at the bottom of Dr. Clark's course on the question of strong drink, we are unable to say, but this much we may say, that, if it has, it would betray nothing foreign to a kindly and high-minded man, and that "Kosmos's" dissection of so secondary an aspect of an honorable career is in the highest degree ungenerous, not to say impudent.

DRAM-DRINKING AMONG WOMEN.

MUCH has been said of late years about tippling as indulged in by women of wealth and social position, and, facts force us to admit, with a good deal of reason. Moreover, that women of the criminal or semi-criminal class included drunkenness among their vices has been well enough known. It is something of a surprise, however, to find an intelligent and painstaking observer, and one of the female sex at that, recounting the extent to which, as she infers, the working-women of so enlightened and prosperous a State as Massachusetts take up the habit of dram-drinking early in life, and as the first step in a career of vice if not of crime. And yet such is the purport of an elaborate analytical article in the October number of the "Quarterly Journal of Inebriety," by Lucy M. Hall, M. D., the physician in charge of the Reformatory Prison for Women at Sherburne, Mass.

This lady has examined into the facts in the cases of two hundred and four women committed to the prison—one hundred and thirty-two for drunkenness, fifty-six for offenses against

chastity and public order, and sixteen for crimes involving loss of property. As a result of her study of these cases, she comes to the conclusion that the associations into which young women are brought by working together in large numbers in manufactories ("mills") have a special tendency to lead to habits of intemperance. Many a girl, according to her showing, had no other temptation than the example set by some associate; and often one girl with a fondness for beer proved the ruin of numbers of her fellow-laborers.

This is certainly a melancholy picture, for the female mill operatives of Massachusetts are largely recruited from among the agricultural population of the State, a class far removed from any innate propensity to vice. It seems to us quite possible, since the author seems to have relied mainly on the stories told her by the prisoners, that their tales were not unvarnished—in short, that many of them took up habits of intemperance only as a secondary step in a downward career. Many a woman would be tempted to account for her intemperance (a fact she could not deny) by pleading the circumstances alluded to, while she would hesitate to confide to one of her own sex the vice that had preceded it. We are inclined to think, therefore, that the significance of the facts given in the article may not be quite so appalling as it appears to be at first sight.

MINOR PARAGRAPHS.

THE COUNTRY BRANCH OF THE NEW YORK INFANT ASYLUM.

LAST week we alluded to an outbreak of diphtheria in the establishment at Mount Vernon. We are glad to be able to state now that in consequence the visiting medical staff has been strengthened by the appointment of several additional physicians, who, together with the other members of the staff, will visit the house daily during the continuance of the endemic. Our informant adds that the outbreak is now well under control. Nevertheless, the East Chester Board of Health is reported to have censured the managers severely. In addition, two members of the Board of Managers, Mr. Theodore Roosevelt and Mr. T. K. Gibbs, have published a statement setting forth their disapproval of the management of the institution for some months past, and intimating that the President, Mr. Clark Bell, is largely responsible for the unfortunate discord prevailing in the board and among the medical officers.

CIDER AND ALCOHOLISM.

At a recent meeting of the *Association française pour l'avancement des sciences* the fact was brought out that alcoholism was most common in those parts of France in which apples were produced in abundance, and the vine was not cultivated. M. Leudet, of Lyons, explained the fact by stating that the cider was distilled, yielding a spirituous liquor *d'un très mauvais goût et probablement toxique*. If this is the case, we can only say that our French friends have not yet learned the art of making "apple-jack" as it should be made.

AN UNFOUNDED IMPUTATION ON THE PRESIDENT OF THE ACADEMY OF MEDICINE.

In the "Boston Medical and Surgical Journal" for October 11th there appears a report of the meeting of the New York Academy of Medicine, held on the 4th inst. The bias of the

writer is very apparent, and one statement ought not to be allowed to pass uncontradicted. Although probably unintentional, it is really a libelous imputation on the President of the Academy, which the writer no doubt will promptly correct. It asserts that, two gentlemen, "whose names had been used without proper authorization, having declined to serve in this capacity, an 'amended notice' became necessary." Both the gentlemen referred to had agreed, one to move and the other to second the amendments, and neither withdrew until after the first notice had been printed.

THE LATE EGYPTIAN EPIDEMIC.

COMMENTING on the report that Dr. Koch had found a choleraic bacillus in his investigations in Egypt, the "Tribune" mentions the divided state of medical opinion on the bacillus theory of consumption, and adds: "Moreover, it is now well understood that the disease recently prevailing in Egypt was a local epidemic, and not Asiatic cholera." We should all feel grateful to the "Tribune" for settling the question.

NEWS ITEMS.

INFECTIOUS DISEASES IN NEW YORK.—We are indebted to the Sanitary Bureau of the Health Department for the following statement of cases and deaths reported during the two weeks ending October 16, 1883:

DISEASES.	Week ending Oct. 9.		Week ending Oct. 16.	
	Cases.	Deaths.	Cases.	Deaths.
Typhoid fever.	74	25	59	19
Scarlet fever.	42	2	40	5
Cerebro-spinal meningitis.	8	6	4	3
Measles.	10	5	17	4
Diphtheria.	29	14	37	13

It is gratifying to note that this table shows a diminishing mortality from all the zymotic diseases except scarlet fever, and a decrease of the number of cases reported even of that disease.

YELLOW FEVER.—Pensacola is now reported to be free from the disease, and there is said to have been no recent case among the shipping at Vera Cruz. A surgeon of the Marine-Hospital Service has been ordered to Brewton, Ala., to investigate the alleged outbreak mentioned in our last issue.

M. PASTEUR'S CHOLERA COMMISSION has left Egypt to return to Paris.

AN UNQUALIFIED PRACTITIONER IN HARLEM.—An individual named Sebastian Kunzig, living in One Hundred and Fifteenth Street, is under arrest charged with having caused the death of a man to whom he had sold a powder which he alleged to be an infallible cure for malarial disease. The sick man died soon after taking a portion of the powder, and Kunzig is held to await the action of the coroner's jury. There seems to be nothing to show that he has the slightest trace of a medical qualification, and he is, therefore, liable to prosecution even if acquitted of the offense for which he is now held.

THE NUMBER OF PHYSICIANS IN AMERICA.—We are informed by the Secretary of the Illinois State Board of Health that, by a typographical transposition on page 175 of the advance sheets of the section on "Medical Education and the Regulation of the Practice of Medicine," issued by the board, the total number of physicians in the United States and Canada was made to read "60,410," instead of 90,410; and the proportion of population to each physician, "900" instead of 600—the figures "6" and "9" having been accidentally transposed.

ST. VINCENT'S HOSPITAL.—On Thursday Mr. Lawrence Barrett and the company of the Star Theatre generously gave a

matinée performance of "Richelieu," the profits to be devoted to furnishing the new wing of the hospital.

THE UNIVERSITY OF DUBLIN.—Dr. Cunningham has been made professor of anatomy.

PROFESSOR LISTER, we learn from the "Lancet," was received with great enthusiasm on the occasion of a recent visit to Pesth, the demonstrations including a torchlight procession.

THE MEDICAL SOCIETY OF THE COUNTY OF NEW YORK will hold its annual meeting, for the election of officers, on Monday evening, the 22d inst., at the hall of the Young Men's Christian Association, Twenty-third Street and Fourth Avenue.

THE MEDICAL SOCIETY OF THE COUNTY OF WESTCHESTER.—At a meeting held last Tuesday, at Tarrytown, Dr. George J. Fisher, of Sing Sing, read an exceedingly interesting paper on Avenzoar.

THE NEW YORK OBSTETRICAL SOCIETY.—The annual election of officers, held last Tuesday evening, resulted as follows: President, Dr. William M. Polk; First Vice President, Dr. Clement Cleveland; Second Vice-President, Dr. Paul F. Mundé; Recording Secretary, Dr. Frank P. Foster (re-elected); Corresponding Secretary, Dr. Emil Noeggerath (re-elected); Treasurer, Dr. Joseph E. Janvrin; Pathologist, Dr. Henry J. Garrigues (re-elected); new members of the Committee on Admissions (to serve two years), Dr. Bache McE. Emmet, Dr. Benjamin F. Dawson, and Dr. Colin Mackenzie.

THE REMAINS OF HARVEY were to be removed last Thursday from their present resting-place, and placed in a sarcophagus at the Harvey Chapel, provided by the Royal College of Physicians.

A DAILY MEDICAL JOURNAL has been started in Paris.

OBITUARY NOTES.

FREDERICK D. LENTE, M. D., OF COLD SPRING.—Frederick Divoux Lente, M. D., died at Cold Spring, N. Y., on Thursday of last week, in the sixtieth year of his age. Dr. Lente was a native of North Carolina, and received the degree of A. M. from the University of North Carolina. In medicine, he was graduated from the Medical Department of the University of the City of New York, in the class of 1849. After having served on the house staff of the New York Hospital, he settled in practice at Cold Spring, where his experience as surgeon to the West Point Foundry conspired with his great natural ability to make him known as a surgeon over a wide section of that part of the State. He soon acquired a large practice, and was highly esteemed in the community in which he lived. At the same time he made himself known favorably to the profession throughout the country by numerous important contributions to medical literature, many of which were published in this journal. The more important of the latter were entitled: "Sedative Action of Calomel," "Intra-uterine Medication," and "Treatment of Intermittent Fever by the Hypodermic Injection of Quinine." The last-mentioned paper reported several hundred cases, and is thought to have been the first publication on the subject in this country.

Several years since, the state of Dr. Lente's health obliged him to give up his laborious practice at Cold Spring, and for a time he resided in New York, where he turned his attention to gynecology. At one time he held a professorship in that branch in the Medical Department of the University of the City of New York, and was one of the assistant surgeons of the Woman's Hospital. His failing health soon compelled him to make another change, however, and for some years past he has spent

the winter in Florida and the summer at Saratoga. But he was never idle; whether in Florida or in Saratoga, his professional services were in request, quite as much at the instance of his *confrères* as in consequence of his own exertions.

Dr. Lente was an accomplished therapist, and in every respect a sagacious practitioner. He was much admired by his professional brethren for his ingenuity and his fertility of resource, he was highly esteemed as a consultant, and he was beloved as a man. We learn that his death was due to cerebro-spinal meningitis.

Letters to the Editor.

THE TREATMENT OF PULMONARY CONSUMPTION.

ALLEGHANY CITY, PA.

To the Editor of the New York Medical Journal:

SIR: Having had ten years of considerable experience in the treatment of lung diseases, I desire to offer a few remarks on the management of phthisis, or consumption of the lungs.

Andrew Clark, F. R. C. P., London, pronounces phthisis to be "the assemblage and progression of symptoms which are due to an ulcerative or suppurative destruction of more or less circumscribed non-malignant deposit in the lung." And "it is almost an axiom that tubercle *per se* does not kill. It is according to the character of secondary complications that the future of a case is determined." He divides the disease into "tubercular phthisis, pneumonic phthisis, and fibroid phthisis." Professor Niemeyer, of the University of Tübingen, the great philosopher who died too soon, remarked that "the term tubercularization has been productive of great confusion, and against it I have long protested." "The treatment of consumption has made great advance since recognition of the fact that the disease depends, as a rule, upon inflammatory action, and is only now and then due to neoplasm."

Professor J. Hughes Bennett, of the University of Edinburgh, the most accomplished of European authorities, in Reynolds's "System of Medicine," vol. ii, page 113, writes: "It would thus appear that there is nothing essentially destructive or necessarily fatal in phthisis, and that in all stages of the disease it may be checked, and enable the individual to live many years subsequently. So far from being considered uniformly or generally fatal, it is admitted that treatment can in a great majority of cases prolong life, while in many, the number of which is annually increasing, a complete and permanent cure may be effected."

I remember well of having once seen a man enter the examination-room of Professor Alonzo Clark, of the New York College of Physicians and Surgeons. A glance told him the consumptive's tale, and, without a word, this most venerable and distinguished of American physicians remarked: "As I came up Broadway, across a house-front I read a sign—'Consumption can be Cured.' Yes, that's so; consumption *can* be cured; but whether the individual within at that establishment can cure it, that's another thing. I can see no reason why incipient phthisis can not be cured just as well as an ulcer upon the surface of the body."

I desire to draw particular attention not alone to the very clear and pointed quotations made, but to their very high authority. Bennett, Niemeyer, Andrew and Alonzo Clark, are, in this class of diseases, with Laennec and Louis, of France, the most illustrious in the history of medicine.

Notwithstanding the now well-established facts in pathology, and their clear therapeutical indications, phthisis remains the *pons asinorum* of the profession. The modern doctrines are

thoroughly practical, most liberal, wholesome to the understanding, and full of hope to the afflicted. In my examinations in the dead-house, I have seen lungs, as Bennett and others have, containing many scars, cicatrices that tell the tale of former loss of tissue. I believe the treatment of consumption to be as perfect to-day as it will ever be, or need be. But, to get the best results, treatment must be much more systematic than at present, and more persistently carried out. The hitherto hopeless character of the disease has made many careless in its management. And failure to convince patients of what is really known and can be done for them has caused many of them to seek the negative methods of homœopathy, the abomination of patent medicine, and heartless, venal quacks.

There is too much medication in this disease. Advise patients upon the laws of physiology and hygiene, and what little medicine is needed, let it be conservative, and let it be mild. A rational, physiological management of this affection, based upon the facts of pathology, would indicate nourishment as a matter of prime importance. Give milk, cream, butter, eggs, olive-oil, cod-liver oil, mush and milk, bread, and such other articles, light and digestible, as judgment will permit. Do not derange the stomach by acids, or sweet sirups for cough. *Acids* and all cough *sirups* disagree, and had *better never be given*. When occasion requires, I give pepsin straight, but never any of the proprietary substitutes. To *hold digestion good* I consider a great point in this disease.

I always insist on such kind and amount of exercise as will suit the case. Especially is open-air exercise to be commended. Never let a patient over-clothe, so as to make the skin delicate and impressionable to the least atmospheric change, and, perhaps, constantly sweaty and debilitating. Apply dry friction daily to the skin of the whole body until it glows; and, when the patient can bear them, daily salt-water baths are of great service. They strengthen the skin, remove the cold-catching tendency, and stimulate nutrition.

Keep the patient much in the open air, and his apartments well aired. On general principles, I object to a change of climate for most cases, because I know it often requires a person to be in perfect health to stand acclimatization in a distant land. And some of my acquaintances who have sought health in foreign lands have died there. To become inured to another climate than our own is often a severe strain. Give consumptives a dry house and pure air in their native place, or let them remove a short way, but seldom to a great distance. I have all my patients take breathing exercise, in this way: A breath is taken, deep and full as possible, held as long as possible, and then very slowly expired; and this is repeated for ten minutes thrice daily. And, although the proceeding requires great care, I sometimes use a Politzer inflator to clear the bronchial tubes, and often follow it with a mild carbolyzed glycerin spray from a Mattson continuous nebulizer. I think this does good in allaying irritation and troublesome cough. It is used with decided benefit in nasal and laryngeal catarrhs, and I think with benefit in the bronchial catarrh complicating phthisis. Belladonna is my stand-by in night sweats.

I always examine the sputa microscopically to see the progress of my patient. I take the temperature regularly, in the mouth as most convenient, to assist me in prognosis and treatment.

RICHARD B. FAULKNER, M. D.

THE MEDICAL CLUBS OF BUFFALO.

306 FRANKLIN STREET, BUFFALO, N. Y., September 26, 1883.

To the Editor of the New York Medical Journal:

SIR: In your issue of the 15th of September inst. your Buffalo correspondent closes his letter as follows: "One of the

medical clubs of the city, I hear, has passed a resolution that its members shall only call each other in consultation. It might well be named the Medical Trades-Union." There are, so far as I know, but two medical clubs in Buffalo. I am a member of one of them—The Medical Union; and, so far as that organization is concerned, the statement of your correspondent is entirely without foundation. Perhaps he can himself answer for the other club, as he is, "I hear," a member of it.

W. W. POTTER.

THE JEFFERSON MEDICAL COLLEGE.

PHILADELPHIA, October 13, 1883.

To the Editor of the New York Medical Journal:

SIR: In your issue of this date appears a letter from your Philadelphia correspondent containing two erroneous statements. The first is, "the students, thus far, at Jefferson are less numerous than last year." The other is, "owing to the different system of lecturing, the class is later in getting together." Both statements are comparisons with the state of fact at the University of Pennsylvania. It affords us pleasure to hear from your correspondent any facts creditable to the university. He could not be expected to praise Jefferson, but certainly it is his duty to assure himself of the correctness of any statements made about this college in a letter to your journal.

Very truly,

ROBERTS BARTHOLOW, M. D., Dean.

** It happens that the author of the letter complained of is an alumnus of the Jefferson Medical College, and a gentleman far above the suspicion of entertaining an animus against that institution, even if it were not his alma mater.

Proceedings of Societies.

THE NEW YORK ACADEMY OF MEDICINE.

A STATED meeting was held October 18, 1883, the President, FORDYCE BARKER, M. D., LL. D., in the chair.

The report of the librarian having been read by Dr. E. Darwin Hudson, and accepted, the President announced the special order of business for the evening to be the continuation of the consideration, in Committee of the Whole, of the amendments to the constitution and by-laws proposed at the last meeting.

IN COMMITTEE OF THE WHOLE, Dr. ELLSWORTH ELIOT in the chair.—Dr. AUSTIN FLINT, Jr., said that he did not wish to obstruct or oppose the discussion of these proposed amendments in the Committee of the Whole, but thought, as he had said at the last meeting, that there was no necessity or reason for their discussion, either in Committee of the Whole or before the Academy. He had not been able to see any reason why a scientific paper was not prepared for the last meeting—it might have been done under the notice that was sent out. The remarks made at the last meeting by the gentleman who moved the amendments [Dr. Edward L. Keyes], and by the gentleman who seconded them [Dr. Alfred L. Loomis], he believed then, and he believed now, were not in order, because properly there was nothing before the Academy. He repeated that he was not now speaking in opposition to the course of the meeting, but as the spokesman of a certain number of Fellows of the Academy who believed that the interests of the Academy could best be served by maintaining its present by-laws in regard to the matter of ethics, and who were unalterably opposed to the amendments *in toto*. The plain in-

tention of the proposed amendments was to eliminate from its constitution and by-laws everything relating to ethics; the result of their adoption would inevitably be to deprive the Academy of all disciplinary power, to do away with its right of representation in other societies, and to reduce it to the rank of certain organizations, such, for instance, as the Medical and Surgical Society and other societies, which, while they doubtless did good work, did not stand before the profession in the attitude to which this Academy aspired, and which it had always hitherto maintained. It was useless to discuss the amendments, for every one in favor of the old code would vote against them, and no amount of eloquence would convince those who opposed that code. The ethical question was what he supposed the supporters of the amendments had chiefly in view, and he did not imagine that they laid much stress on those of the amendments which did not affect the matter of ethics; nevertheless, as a matter of some importance, he wished to call attention to the detriment that might ensue to the Academy by reducing the quorum in the Council, as that measure would increase the power and the responsibility of a few individuals—it would make it possible for three individuals to dispose of matters of the utmost importance. At the last meeting he had, for the sake of regularity, made his motion that the amendments should take the usual course, and had protested against any amendment of that motion; but the President's ruling had been against him. He hoped that the rulings to-night would be different. This was the first time in the history of the Academy that any proposed amendments to the constitution or by-laws had been brought before the Academy without having first been submitted to the Council; and never before had a recommendation by the Council failed to be agreed to. In this instance the Council's recommendation has not even been accepted or acted upon in any manner. The idea that the amendments could possibly secure a three-fourths vote was ridiculous. Discussion was therefore useless, and he moved that the committee now rise. Seconded.

The President ruled that the motion was not debatable.

Dr. D. B. ST. JOHN ROOSA appealed from the decision of the President, and, the appeal having been seconded, the sense of the meeting was taken, and the President's ruling was sustained.

The motion to rise was then put and carried.

The President then resumed the chair.

REPORT OF THE COMMITTEE OF THE WHOLE.—The chairman of the committee reported that the committee had sat and risen. The President ruled that the chairman of the committee had not properly reported the action of the committee, since he had not reported the resolution adopted by the committee at its previous session [see the journal for October 6th, page 388].

Dr. FLINT, Jr., appealed from this decision, and the President's decision was sustained.

At the request of the President, Dr. WESLEY M. CARPENTER, Secretary of the Committee of the Whole, then read an extract from the minutes of the committee's session, including the resolution alluded to.

Dr. FLINT, Jr., moved that the report of the Committee of the Whole be laid on the table. Seconded.

Dr. ROOSA and four other Fellows called for the yeas and nays.

The President announced that the register would be used in calling the yeas and nays.

Dr. FLINT, Jr., objected, and stated that the yeas and nays ought to be called from the roll.

The President repeated his ruling.

Dr. S. S. PURPLE remarked that, with the exception of the meeting before the last, this was the first instance in which the register had been used for calling the yeas and nays.

Dr. FLINT, Jr., asked to have his protest entered on the minutes, and appealed from the ruling of the President.

The President's ruling was sustained.

Dr. FLINT, Jr., called for a division.

The President appointed Dr. Henry D. Nicoll and Dr. Charles Carroll Lee tellers, who reported that the President's ruling was sustained by a vote of 88 to 84.

The President then announced that opportunity would now be offered for those who had not signed the register to do so before the vote was taken.

The vote on the question of laying the committee's report on the table was then taken, and was declared lost by a vote of 102 to 115.

Dr. ALFRED L. LOOMIS moved that, when the vote on the adoption of the amendments as they now stood before the Academy was taken, it be taken by ballot. Seconded and carried.

Dr. Loomis then moved that the meeting now proceed to the ballot. Seconded.

Dr. AUSTIN FLINT, Sr., moved, as an amendment to Dr. Loomis's motion, that the amendments be indefinitely postponed. Seconded.

On this amendment Dr. Flint, Jr., and four others called for the yeas and nays.

The yeas and nays having been taken, the amendment was declared lost by a vote of 94 to 117.

Dr. Loomis then moved that the meeting now proceed to ballot on the adoption of the amendments. Seconded and carried. The President appointed Dr. Henry D. Nicoll and Dr. Daniel Lewis tellers.

The vote on the adoption of the amendments, as declared by the tellers, was as follows: Yeas, 121; nays, 92. The amendments were therefore declared lost, a three-fourths vote being necessary for their adoption.

Having declared the vote, the President said:

I beg the indulgence of the Academy only for a few moments. Duty and honor demand that every member of an organization like this Academy, with its high scientific aims and its joint-stock property necessary to make those aims attainable, should cheerfully yield to the will of the majority. No one can doubt that it was with pain and regret that I announced the failure of a three-fourths vote to adopt the amendments, which I regarded as most important for the future of the Academy. Having given my reasons for this belief in a letter addressed to every Fellow, and having at the last meeting still further explained my views, but having failed to convince a sufficient number to secure their adoption, I bow to the decision. No one can assert that I have sought to secure my end by personal influence or personal solicitation. I have felt that this matter should be left to the intelligence and judgment of such a class of men as constitute this Academy, unbiased by passion or partisan feeling. I am well aware that it demands a higher tone of principle, and a more noble magnanimity, to cheerfully acquiesce in the will of a minority, but I now earnestly beg of all to forget, so far as this Academy is concerned, all past controversies—many of which, I am convinced, are not so much difference as to principles as differences in regard to details—and that all should unite in earnest work for this Academy in its high endeavors to advance medical science, to support and increase this important library, for which so much has been done in the past by most liberal benefactors, and to keep up the journal and circulating departments. For my own part, I can only promise for the future what I have sought to give in the past—my best efforts in this direction, not only while I have the honor to hold my present position, but ever after.

Dr. Loomis said that, to prevent any repetition of the con-

tention that had lately disturbed the harmonious working of the Academy, he would move to rescind the following preambles and resolutions adopted by the Academy at its meeting in April last :

Whereas, The New York Academy of Medicine adopted in its by-laws, as its standard of medical ethics, the Code of Ethics of the American Medical Association; and

Whereas, Each newly elected member of the Academy is required to sign its constitution and by-laws; be it

Resolved, That the Committee on Admissions is hereby instructed to report to the Academy for election as resident Fellows no physician who is known to the committee to be in opposition to the code of the Academy, and who, as a consequence, can not consistently sign the by-laws of the Academy.

Resolved, That these instructions to the Committee on Admissions be continued in force until the American Medical Association shall have modified or repealed its code of ethics, and such modification and repeal shall have been adopted by the Academy, or until the Academy shall have modified or repealed its by-laws referring to medical ethics.

The motion having been seconded by Dr. Roosa, Dr. Loomis supported it by urging that we were not here to-night to vote on the matter of codes of ethics, but to decide upon measures involving the welfare of the Academy. Therefore, he urged that we should all unite to repair the damage that the passage of the resolutions had inflicted. Otherwise there might be a division of the profession in this city—there might be two Academies—which God forbid! The resolutions adopted last spring had acted as fire-brands, and to-night a majority had virtually repudiated them.

Dr. E. C. HARWOOD handed in a written personal explanation of his having declined to vote on Dr. Flint, Jr.'s resolutions last spring. For his course on that occasion he had been charged with cowardice, inconsistency, etc. His reason for declining to vote on that occasion had been that he construed the resolutions as subversive of the action previously taken by the Academy on motion of Dr. Flint, Sr.

Dr. FLINT, JR., maintained that Dr. Loomis's motion was out of order, the action of the Academy last spring having been such as not to admit of reversal. The President ruled that Dr. Loomis's motion was in order, because there was a difference between rescinding and reconsidering.

Dr. FLINT, JR., appealed from the President's decision, and referred to the rules of order.

On appeal, the President's ruling was sustained.

Dr. Roosa spoke in favor of Dr. Loomis's motion, alleging that the action taken last spring had been taken in a packed meeting, the excuse for packing the meeting being that the anti-old-code party had packed the meeting of the State society, at which the new code was adopted, which latter action he entirely denied. The action taken by the Academy last spring had not been justified by anything done by the anti-old-code party.

Dr. C. R. AGNEW favored Dr. Loomis's motion, stating that the action of the Academy last spring was in violation of those portions of the constitution and by-laws appertaining to the requirements for admission to fellowship. It was, therefore, in the nature of an amendment, and, due notice not having been given, it was null and void. The meeting had been packed by means of a secret notice sent to those favorable to the resolutions, of which notice he now had a copy in his possession. [Tremendous applause].

Dr. FLINT, JR., stated that he was quite willing, for his part, that certain Fellows of the Academy who offered their resignation at the meeting last spring should now be allowed to withdraw their resignation; but he thought it no more than decent that those gentlemen should ask the privilege.

Dr. AGNEW, in reply, read the following from Art. VII: "Sec. 3. No resignation shall be valid until accepted by the Academy."

A motion was then made to adjourn. Seconded and lost.

Dr. HENRY G. PIFFARD moved the previous question. Seconded and carried unanimously.

Dr. Loomis's motion was then put and carried.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

A STATED meeting was held September 13, 1883, the President, Dr. TYSON, in the chair.

A VERY LARGE ULCER OF THE STOMACH WITH UNUSUAL FEATURES.—A specimen was presented by Dr. CHARLES W. DULLES, who said: The specimen came from the body of a patient of Dr. Edward L. Anderson, who had had Dr. J. H. Musser see her in consultation during life, and who asked my assistance in making the post-mortem examination because of Dr. Musser's temporary absence from the city. To the clinical notes of Dr. Anderson and my notes of the autopsy Dr. Musser will no doubt add his own impressions of the case, which has appeared to me to be of singular interest and instructiveness. The following are Dr. Anderson's notes:

Mrs. M., aged thirty-five years, the mother of five children, one of whom died of stricture of the pyloric or cardiac end of the stomach. Both her parents died before their fiftieth year.

May 12, 1883.—At my first visit she was confined to bed, and stated that since the birth of her last child she had not been well, having more or less dyspepsia, and growing steadily worse for the last six months. She complained of a constant burning pain in the region of the stomach which nothing seemed to relieve. She vomited daily, sometimes immediately after a meal, but oftener not until evening, when it seemed to her all the food she had taken during the day would be ejected. The matter vomited was intensely sour, dark, and frothy, having the appearance of yeast. There was always pain after vomiting, and at all times there were irregular pains over the abdomen. She was anæmic, emaciated, and had a weak but regular pulse. Upon physical exploration, I could find no tumor. Her heart and lungs were normal, and, as I afterward learned, the urine likewise. The abdomen was resonant. She was placed on a milk diet, with pepsin and ten drops of sulphurous acid every three hours. She took two quarts of milk daily, and did not vomit until the 22d of May—a period of ten days. On this day she vomited but a small quantity of food. May 23d, the period of her menstruation (though not menstruating from April until the time of her death), she ate a fritt for supper on her own responsibility. This indiscretion brought on an attack of vomiting and sufficient prostration to occasion considerable alarm to her family, and cause them to send for me. I found her much exhausted, only able to speak in monosyllables, with the pulse 104 and the respiration 40. She complained of intense burning pain in the stomach. External heat and sulphurous acid internally gave relief. This was the first time I was able to see the vomited matter, and I found it to be digested blood, about two quarts in amount. Dr. J. H. Musser kindly examined the material microscopically, and found blood-corpuscles, pus globules, and epithelial cells. I was told she had vomited similar material prior to my first visit. The vomiting was repeated on May 25th, 26th, 27th, and 28th, and several times there were free hæmorrhages. She was treated with bismuth and carbolic acid, with enemata of milk, whisky, and eggs, and inunctions of cod-liver oil. Hæmorrhage occurred again on June 6th, 7th, and 8th. On June 10th Dr. J. H. Musser saw the case in consultation. He thought he detected a tumor. We came to no positive diagnosis, but wavered between carcinoma and ulcer. It was only when the patient was placed in the knee-elbow position that a tumor could be felt, and this a little to the right of the median line. The treatment was changed to one drop of tincture of hamamelis every twenty minutes, and a pill containing a quarter of a grain of oxide of silver three times daily. June 17th and 18th hæmorrhages again occurred, but from this time until her death, about six weeks later, there were no more hæmorrhages, also little inclination to vomit, and very

little pain. This was notwithstanding the fact that I have reason to believe that, for about a month before her death, she paid no particular attention to her diet, while the only part of the treatment carried out was the taking of the oxide-of-silver pill. About three weeks before her death a troublesome cough set in, but it was easily controlled by opium. Her death followed a large meal and free draughts of coffee and water. The act of death was quiet and gradual, entirely unaccompanied by pain or alarm.

The notes of the autopsy are as follows:

September 2, 1883.—Thirty hours after death, rigor mortis absent, body much emaciated, right hand puffy with œdema, bruise over middle of right shin. Examination of thorax, abdomen, and pelvis. There was no fluid in either pleural cavity. Both lungs were attached at the upper part to the parietal pleura by adhesions which broke down easily. The upper lobe of left lung was pretty well solidified with chronic catarrhal deposits, quite soft. In each upper lobe there was a cavity. That in the right lung was as large as a hen's egg, that in the left of about the size of a pigeon's egg. Both contained dirty, grayish detritus. The lower lobes of both lungs contained a number of small nodules of caseous degeneration. The heart was very small and firm, of about the size of a goose's egg. Its valves were normal, and it contained but a small quantity of fluid blood in its right cavity. The abdomen contained about a third of a pint of slightly turbid serous fluid. There was not the slightest injection of the peritonæum anywhere, nor any other evidence of peritonitis. The pelvic organs were all normal in appearance except the uterus, which, though of normal size, was in a state of marked retroflexion. The bladder contained about two fluid-ounces of urine. There was no omental apron. The liver was of normal size and appearance. The gall bladder was normal in appearance, and contained about half a fluidounce of saffron-colored bile, but no gall stones. The spleen was normal. The kidneys were of normal size, rather hard; their capsules were adherent; their surface was a little granular. On section, the cortex was found somewhat diminished. The supra-renal capsules were very tough, the right more so than the left. The pancreas was of normal appearance at its left end, but at its right it was attached to the stomach, and was decidedly indurated. Here it was imbedded in a quantity of delicate adhesive bands, which united into a bundle its own duct, the end of the ductus communis choledochus, and the pyloric end of the stomach. The intestines were collapsed and empty, except the duodenum, which contained a small quantity of thick, bile-stained chyme. The stomach itself presented the features of the greatest interest. It was much enlarged by dilatation, its walls were thin and pale, its vessels along the greater curvature much enlarged and full of dark blood. It occupied a slanting position from above downward, and from left to right. It contained about two quarts of grumous, sour-smelling fluid ingesta, and with this it was not nearly filled. At the upper part of the pyloric entrance it bore a firm puckered induration, looking like a cicatrix, about two thirds of an inch in diameter. Close by this was a large ulcer about two inches and a half long and over an inch wide, with indurated, thickened, and, in part, perpendicular edges. This ulcer passed through all the coats of the stomach. Nevertheless, the large quantity of fluid contents of this viscus had not escaped from its cavity, because the ulcerated part of the stomach was applied against the adjacent pancreas, and attached to it by adhesion. This attachment, however, was extremely delicate, and would not bear the gentlest handling. It gave way while the viscera were still in the abdomen, upon an attempt being made to lift the pancreas up while the stomach was held aside. This disclosed what seemed to be a loose connective-tissue mesh between the stomach and the pancreas, in which a small quantity of the ingesta was found. The pyloric orifice of the stomach was at the edge of the induration surrounding the ulcer, and it was so contracted as to barely admit the passage of a grooved director through it.

CANCER OF THE LIVER.—The patient, S. A., aged sixty-five, single, was admitted to the Episcopal Hospital July 31, 1883. The following notes were made by Dr. CLAXTON, the resident physician:

While at work, six weeks ago, the patient began to experience pain in the epigastric and right hypochondriac regions. Two weeks later

he noticed that he was jaundiced, and that there was a lump (or swelling) in his abdomen. Upon admission to the hospital he was much emaciated, and very feeble. Skin and conjunctivæ intensely jaundiced, of a deep saffron hue. There was marked bulging noticed in the right hypochondriac and epigastric regions. The tumor, which could be plainly felt through the thin abdominal wall, was found to extend four inches below the xiphoid cartilage and two inches to the left of the linea alba. The mass occupying the right hypochondriac region was found to be distinctly nodulated, and very hard. Some of the nodules appeared to be umbilicated. The patient presented a markedly cachectic appearance; tongue thickly coated with a dirty yellowish-brown fur; his bowels were constipated, and there was anorexia. Purgation failed to influence the size of the tumor. The patient complained of insomnia, but did not seem to suffer much. Mental action was sluggish. He became rapidly weaker, and for fully a week before his death it was noticed that his extremities were very cold, and quite three days before death his pulse had become so weak as to be almost imperceptible. Death finally occurred on August 16th.

The post-mortem examination was necessarily a hasty one, as the body was removed from the hospital within two hours of the patient's death. The new growth appeared to involve, however, only the liver and the pancreas. The common bile duct was completely occluded by a hard nodular mass which had its apparent origin in the pancreas. Above the occlusion the cystic duct and the gall bladder were distended with dark olive-green bile. The liver weighed five pounds six and a half ounces. Sections of the organ showed complete infiltration with cancer nodules, and little or no normal hepatic tissue could be seen. The spleen was markedly atrophic, weighing one ounce and a half. The kidneys were deeply stained with bile and seemed somewhat contracted. The heart was very small, and its muscular tissue flabby.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

A STATED meeting was held October 4, 1883, the President, R. A. CLEEMAN, M. D., in the chair.

CESAREAN HYSTERECTOMY.—Dr. W. H. PARISH reported a case of what is known as the Porro-Müller operation, and showed the specimens, consisting of the uterus, a portion of the abdominal wall (showing the wound united, with the stump of the cervix at its lower angle), and the external genitals, together with the mons Veneris, the vagina, and the bladder. The ureters were found entirely free.

Sallie Smith, a deformed dwarf, applied for admission to the Philadelphia Hospital in April, 1883. One of the internes placed her among the pauper women of the outwards of the almshouse. There all the conditions surrounding the dwarf were such as to contribute to her physical deterioration. The women in that portion of the institution are unduly crowded, the ventilation is entirely inadequate, and the food of a character unfit for a pregnant woman. Her presence in those wards was unknown to any of the visiting obstetricians of the hospital until June 15th, when Pauline Root, M. D., one of the internes, ascertaining her pregnancy and her surroundings, conveyed the information to me. I at once had her transferred to the obstetric wards, where she was specially provided for, and her condition carefully investigated. She was a native of Philadelphia. She was unable to give her age—although dwarfs usually appear to be older than they actually are, yet, from what could be learned of her past life, from evident atheroma of her blood-vessels, and from her appearance, I concluded that she must be over forty years of age. Her parents were poor, were born in Ireland, and died in this city during her early infancy. She had been told that her father died of heart disease, and her mother of insanity at the menopause. She did not know how or by whom she was cared for during her early childhood. She attributed her deformities to a fall supposed to have been received when she was a very small child. She was unable to walk until she was seven years of age. Her occupation, from the time she was first able to work, had been that of a house servant. Menstruation began at sixteen years, continued at the usual periods, but rather profusely, until the begin-

ning of pregnancy. She could not recollect ever having been seriously ill. I learned from some of her acquaintances that for a number of years she had been of intemperate habits, repeatedly becoming intoxicated, and indulging in promiscuous sexual intercourse. Her bad habits led to exposure to inclement weather, and, with the influence of cold and damp, doubtless led to the disease of the kidneys, to which I shall again refer. She was pregnant for the first time. The date of the last menstruation was given by her differently at different times. At one time she gave the 1st of October, at another time the middle of October, as the date when menstruation last ceased. She felt movement of the child about the middle of February, though she was also uncertain in reference to the date. The fundus uteri reached nearly to the ensiform cartilage, and I concluded that the full period of pregnancy would be attained about the 10th or 15th of July. She was fifty-one inches high, the head small, mind sluggish, and memory defective; yet she was not an imbecile. The clavicles and bones of the upper extremities, though small, presented no special deformities; they did not show the usual rachitic incurvations. The right thorax was very prominent posteriorly and laterally; the left thorax markedly depressed posteriorly and laterally. Both lungs, but more especially the left one, were greatly encroached upon by the deformed thoracic walls. The heart was displaced upward and to the left, its apex being on a level with and external to the left nipple. Pulse 86, of good volume, but intermittent. Bowels moved daily; urination frequent. Urine contained one quarter albumin, and also granular and hyaline tube-casts. The eyelids were slightly œdematous, but œdema was not recognizable in any other part of the body. The patient complained of frequently recurring frontal headache. At times things seemed darkened to her, and dark specks appeared before the eyes. She had never experienced convulsions, but occasionally had slight fainting attacks.

The vertebral column was markedly curved. The upper third of the dorsal region was slightly convex posteriorly, the lower two thirds markedly convex posteriorly, and also decidedly convex to the right. The lumbar portion was convex anteriorly and to the left. A left anterior lumbar convexity, compensating for a right posterior convexity of the dorsal region. In the erect position, the lower ribs and the crests of the ilia seemed in contact, and the left iliac crest about one inch higher than the right. Posteriorly there was a deep depression at the sacro-vertebral articulation, and the posterior-superior spines were unduly approximated. Externally examined, the sacrum, in its upper two thirds, seemed directed nearly horizontally backward. External measurements with a pelvimeter showed about fifteen centimetres, or six inches, between the posterior surface of the top of the sacrum and the anterior surface of the top of the symphysis pubis. Normally this measurement is about eight inches. Deducting three inches from the external conjugate of six inches would have made the internal or true conjugate three inches. The distance between the anterior-superior spines measured twenty-five centimetres, or about ten inches, the normal being ten and a quarter inches. Between the widest portion of the crests of the ilia the distance was a little less than that between the anterior spines—that is, a little less than ten inches, the normal being eleven and one half inches. The measurement between the crests being less than that between the spines, indicated the pelvis to be rachitic, though it will be seen that the pelvis was not the more usual, typical rachitic one. The external measurements did not indicate decided transverse narrowing of the true pelvis, though internal manual examination did show decided transverse narrowing. Repeated internal examination showed the promontory to be jutting forward, and the anterior surface of the sacrum to be nearly straight, and directed almost horizontally backward. The symphysis pubis was correspondingly inclined downward and backward. The oblique conjugate measured three and one fourth inches, the depth of the symphysis pubis four and a half inch; hence, according to Lusk, deducting three fourths of an inch from the oblique conjugate, I estimated the true conjugate to be two and a half inches. The transverse diameter of the superior strait was evidently considerably shortened, but I could not satisfactorily determine the degree of the shortening. The antero-posterior diameter of the excavation was taken to be less than the corresponding diameter of the superior strait,

and all the measurements of the outlet less than the corresponding ones of the superior strait. The pelvis was diagnosticated to be a generally contracted one, with proportionally greater diminution of the conjugates, and the general contraction increasing from above downward, so as to produce a somewhat funnel-shaped pelvis. The vaginal canal was narrow, the os uteri high up, and the uterine fundus markedly tilted forward. The abdomen was remarkably pendulous.

When the patient first came under our observation, pregnancy seemed to have reached about the end of the ninth lunar month, according to the most probable interpretation of the symptoms, and of the information she gave. The question arose, Would it be best to produce a premature labor at the end of the ninth month, with a generally contracted pelvis, and a true conjugate of two and a half or two and three quarters inches? I decided that, should a premature labor be attempted under such circumstances, craniotomy, or some other similarly dangerous operation, would be eventually necessitated, and that the dangers of such operation would be increased by the addition of those incident to the production of premature labor. Delivery with forceps, or by podalic version, seemed out of the question. There was a choice between craniotomy, symphyseotomy, Cæsarean operation gastro-elytotomy, and the Porro operation. In such a pelvis, craniotomy would have been difficult and tardy, and has been shown, especially by Parry, to be attended with a mortality of mothers too large to compete with abdominal section. I did not prefer the Cæsarean operation, because of its excessive mortality to mothers in European hospitals; and because, of the six Cæsarean operations performed in hospitals in this country, all were fatal to the mothers. A condition almost essential to recovery after Cæsarean operation is rarely met, with, even after normal deliveries, in hospitals. I refer to sufficient retraction of the uterus. A flabby uterus after a Cæsarean operation leads to blood poisoning and to general peritonitis. The experience of many hospitals, as also *a priori* reasoning, would make the Cæsarean operation of very questionable justification in hospitals, especially in large maternities, and more decidedly still in general hospitals. The Philadelphia Hospital is not only a general hospital, but is also part of a large almshouse. Gastro-elytotomy and symphyseotomy have given good results in the hands of a few operators, the former especially in America, the latter in Europe; but both operations have been performed with comparative infrequency, and the question of their respective merits can not be determined by the very limited number thus far performed. I do not desire to discuss *in extenso* here the general question of the relative value of the different operations performed for the relief of advanced pregnancy in very small pelvis. Among the considerations inducing me to adopt the Porro operation, with Müller's modification, were, the smaller mortality to mothers attending this operation in hospitals, and the opportunity it allows the operator of selecting daylight, and of securing the needed assistants.

The patient was placed under the influence of quinine, of Basham's mixture, and of occasional doses of the compound jalap powder. Woolen underwear and proper diet were secured for her. She was isolated from all lying-in women. Her condition did not improve, however, as the time for operation approached; but, on the reverse, a persistent œdema of the face, more troublesome headache, and more marked disturbance of vision, with an increasing quantity of albumin in the urine—all pointed to steadily increasing uræmia. The time chosen for the operation was what was supposed to be the end of the thirty-eighth week of pregnancy. A large, well-lighted, well-ventilated room in the Children's Asylum, remote from the obstetric wards, and one that had for years been used as a private parlor, was selected in which to operate, and in which the patient was to remain after the operation. This room was divested of curtains, carpets, and furniture; its walls and floor were thoroughly scrubbed with carbolic water. The room was then refurnished with chair, table, and a new bed. In short, every means was resorted to to improve, as far as possible, the unfavorable conditions incident to so large an institution as the Philadelphia Almshouse.

The members of the obstetric staff had agreed with me in the diagnosis of the patient's deformities, and also as to the propriety of the performance of a Porro-Müller operation. The patient was also kindly examined prior to the operation by Dr. Albert H. Smith, Dr.

Robert P. Harris, Dr. M. O'Hara, and Anna Broomall, M. D. After receiving a full explanation of the nature of the operation, the patient gave her entire consent. The operation was performed on June 30, 1883, with the assistance of Dr. Duer, Dr. Keating, Dr. Musser, Dr. Stryker, Dr. Montgomery, Clara Marshall, M. D., and Dr. Bernardy, all members of the obstetrical staff, and also with the assistance of Dr. McLoughlin, warden of the hospital. There were present Dr. S. D. and Dr. S. W. Gross, Dr. Ellwood Wilson, Dr. J. L. Ludlow, Dr. Albert H. Smith, Anna Broomall, M. D., Dr. J. H. Brinton, Hannah Croasdale, M. D., and other physicians. On the morning of the operation the room was carbolized with the spray, but the latter was not used during the operation. All instruments were kept in a two-per-cent. carbolized solution, and Listerism, minus the spray over the patient, was observed in the different details. On the morning of the operation the patient received a general bath, and the bowels were moved by enema. A half-hour before the operation she received two ounces of whisky. Dr. Joseph Hearn, one of the surgeons of the hospital, and an experienced anæsthetizer, kindly administered ether during the operation. After etherization the bladder was emptied with the catheter. An incision was then made in the median line of the abdomen seven inches in length, extending from two inches above the symphysis pubis to about one inch above the umbilicus, passing to the left of the umbilicus. The slight bleeding from the lips of the abdominal incision was controlled by artery compressors before opening into the peritoneal cavity. The absence of intestine from in front of the uterus was ascertained by percussion before making the incision. The uterus was easily raised from the abdominal cavity.

Owing to the anterior lumbar curvature, and to the length of the incision, it was impossible to completely prevent the escape of intestines. After the uterus had been turned out, a protector, made of two layers of flannel, with an intervening layer of protective silk, was placed over the abdomen, the object being to avoid chilling, and to prevent the escape of blood and other fluids into the peritoneal cavity. This protector, when used, was wrung from a warm carbolized solution. The next step was to place around the cervix the wire of an *écraseur*, and to constrict the tissues in its grasp to such an extent as to stop all circulation of blood through the uterus without cutting through the peritonæum. This step required speed, care, and judgment. The liability of a loop of intestine or of omentum to be caught by the constricting wire had to be carefully guarded against. Immediately that sufficient constriction had been secured, a short incision was made with a pointed bistoury through the antero-uterine wall down to the placenta, for the placenta proved to be attached anteriorly. The incision was then rapidly extended, from near the neck to the fundus, with a probe-pointed bistoury, guided by two fingers of the left hand introduced into the incision. The blood pent up in the uterus by the constricting wire escaped freely, but did not enter the abdominal cavity. The incision passed to the external surface of, but not through, the placenta. The hand was immediately introduced into the uterus through the exposed membranes at the fundus, and the child quickly turned out, the placenta being in this manœuvre detached in main from the uterus. The cord was promptly tied and cut, and the child handed to Dr. Keating. It was asphyxiated when delivered, and presented a very unpromising appearance. It, however, quickly breathed, and cried under the efforts of Dr. Keating at resuscitation. The rapid resuscitation was effected by alternately dipping the child in basins of hot and of cold water. After removing the infant, the uterus, with both ovaries and both tubes, was amputated a half-inch above the constricting wire; this point was about at the internal os. It was then seen that the wire had completely controlled the circulation, and not a drop of blood escaped from the stump of the uterus. The next step consisted in passing obliquely through the stump two steel pins five inches in length, one above, the other below the wire. After this a strong carbolized silken cord was passed around the stump, in the line of the wire, and partly tightened. The wire was then cut and removed, and the silk cord then very firmly tightened and securely tied. Special care was given to the tightening of this cord and to the tying of a secure knot. The ends of the pins rested laterally on the abdominal walls, and under the ends, on each side, was placed a piece of sheet-lead. The stump was thus secured outside of the abdominal cavity, and rested at the lower angle of the

wound. New carbolized sponges on handles were introduced into the peritoneal cavity, down into Douglas's pouch, but the entire cavity was free from blood or other fluid. The abdominal wound was then closed by deep and superficial silver sutures. The deep ones were introduced so as to include the peritonæum. During the introduction of the deep sutures, flat carbolized sponges were introduced beneath the incision, so as to catch what oozing might occur from the needle punctures. The external portion of the uterine stump was brushed over with carbolic acid, and then invested with lint saturated with carbolized oil. A strip, two inches wide, of dry carbolized lint was placed on the incision; over this a few strips of rubber adhesive plaster were applied transversely; over these a thick layer of carbolized cotton, and over all a flannel binder. The patient was put to bed, and surrounded with pans of hot water. Dr. Montgomery took charge of the patient's general condition during the operation, and administered during its performance four hypodermic syringefuls of whisky. He reports that the time taken up in the operation, from the beginning of the abdominal incision until its complete closure, occupied forty minutes. During the operation the pulse ranged from 100 to 128, the greater frequency being during the making of the incision in the abdominal wall, and was probably due to impeded respiration. The constriction of the cervix had no appreciable effect upon the pulse. Soon after being put to bed, the pulse was 132, but in two hours was 108 per minute, and of good volume. The respirations during the anæsthesia became disturbed and imperfect, producing considerable cyanosis, and probably causing increased frequency of the heart's action.

The patient rallied well, as was shown by return to consciousness, by bodily warmth, and a fair pulse. For about sixteen hours her condition seemed very favorable, excepting that the kidneys had ceased to act. At the end of twenty-three hours there was marked change for the worse; the mind wandering, pulse 140, temperature 100° F. An inspection of the dressing at that time showed some oozing from the stump—perhaps six ounces—but it had then stopped. An additional ligature was placed around the stump, and one of the uterine arteries was separately ligated; the other could not be found; the stump was also brushed over with Monsel's solution. There was no subsequent oozing. That there should have been any loss of blood in this manner was a surprise to me, as the original ligature was so very firmly tightened and secured, and had for a number of hours after reaction so perfectly controlled all bleeding. There was marked atheroma of the vessels of the stump, as was revealed post mortem. After the twenty-third hour the patient grew progressively worse, became uncontrollable and delirious, had convulsive manifestations, and died in coma. There was no vomiting until twenty-six hours after the operation, and it occurred only once. She experienced but slight pain, and sulphate of morphine was given in small quantity—one fourth of a grain hypodermically, soon after the operation; again, one sixth of a grain at the end of eleven hours—and subsequently about the thirty-sixth hour, because of the great jactitation and the difficulty of keeping the patient in bed. The morphine was given hypodermically by Dr. McLoughlin in such small amount that the coma could not have been due to it. Eight hours after being put to bed the urine was drawn with the catheter. Subsequently the catheter was introduced at different intervals, but on each occasion the bladder was empty, and it was also found empty at the post-mortem examination. Only three ounces of urine were secreted after the operation. The patient survived forty-two hours.

Dr. John Gillespie made a careful analysis and microscopic examination of the urine secreted after the operation, with the following report:

The specimen of urine from the woman upon whom the modified Porro operation was performed was examined, with the following result: The specific gravity was 1023; reaction decidedly acid. The urine was of a dirty, yellowish-brown color, and contained a large amount of albumin (rather more than one third). The amount of urea contained in the urine received by me was 10.5 grains for the entire amount. Therefore, if only three ounces of urine were excreted in forty-two hours, the total amount of urea excreted would be about fifteen grains. The sediment contained granular, hyaline, and epithelial casts, renal and bladder epithelium, and granular detritus and blood-corpuseles.

Dr. Wile, the acting pathologist of the hospital, conducted the autopsy, and I extract the following from the pathologist's records: On opening abdominal cavity several slight adhesions were found between the visceral and parietal peritonæum in the region of the surgical incision. Blood-vessels around incision markedly congested. No exudation or other evidences of general peritonitis. Stomach and intestines distended with gas; spleen small, atrophic. Left kidney: Considerable displacement, found between sixth and seventh ribs. Somewhat lobular, on surface pea sized cyst, which extends somewhat into the cortical substance of kidney. Cortex reduced, the seat of parenchymatous, solid, interstitial change. Right kidney: Position normal; shape altered, considerable flattening on upper surface; hilus very marked; capsule adherent, seat of parenchymatous change. Both kidneys in state of contraction. Pelvis: One ounce of bloody serum in Douglas's pouch. Peritoneal and subperitoneal tissue the seat of considerable œdema. Veins around vagina enlarged. Cervix uteri vaginal; orifice round. Liver enlarged; fatty. Thorax: On the left upper anterior side, pleura adherent. Heart: Left side firmly contracted; right relaxed. Right auricle and ventricle seat of a firmly adherent chicken-fat clot. Left ventricle contained small amount of dark, slightly coagulated blood. Left ventricle markedly hypertrophied. Mitral valve, slight thickening. Papillary muscle considerably hypertrophied. Lungs: Hypostatic congestion; œdematous. Cause of death: Heart-clot.

Report of Histological Appearance of Kidney, by H. Wile, M. D.—The blood-vessels are for the most part congested, filled with corpuscles, and surrounded by a growth of connective tissue. The uriniferous tubules are found filled with cellular and granular debris. Some contain pigment, the result of slight hæmorrhages. The epithelium lining of the tubules is granular, and in some places in a state of proliferation, indicating a catarrhal process. The growth of connective tissue between the tubules and about the Malpighian bodies is more marked in some places than in others, and the interstitial process may be regarded as fairly established. A careful measurement was made by Dr. S. D. Lazarus and myself after the pelvic viscera had been removed, with the following result:

Superior strait:

Conjugate.....	3 inches.
Transverse.....	4 "
Right oblique.....	3½ "
Left oblique.....	4 "
Oblique conjugate.....	3½ "
Depth of symphysis.....	1½ "
Obstetrical conjugate.....	2½ "

Excavation:

Conjugate.....	2½ "
Transverse.....	4 "

Upper four sacral vertebræ directed horizontally backward; lower portion of sacrum and coccyx curved sharply forward.

Inferior strait:

Conjugate.....	2½ inches.
Oblique.....	2½ "
Transverse.....	3½ "

A perpendicular to the plane of the superior strait is nearly horizontal, striking the abdominal wall about midway between umbilicus and top of symphysis.

A perpendicular to the plane of the inferior strait would strike the upper part of the third sacral vertebra.

The death of the dwarf must be attributed chiefly to the existence of interstitial and parenchymatous nephritis. She had rallied from the shock of the operation. There was no peritonitis, excepting in the immediate vicinity of the incision. It was too early for septic poisoning to produce death, and there were no indications that such had occurred. The loss of blood had been trifling, and death occurred too soon to be attributable to exhaustion from this cause. The acute and almost complete suppression of urine, the symptoms after the operation, the symptoms prior to the operation, and the results of examination of the urine and of the kidneys after death, all pointed to the dis-

eased kidneys as the cause of the fatal result to the mother. It is well to note that union had occurred throughout the entire extent of the abdominal wound. There were adhesions between the small intestines and the parietal peritonæum along the line of incision. The latter fact is of interest, viewed in the light of death in a few instances after laparotomy being attributed to strangulation of the bowel, due to constricting inflammatory bands. The child was of small size, and died at the end of three weeks, of inanition.

Dr. R. P. HARRIS remarked that this was the only Porro operation that had been complicated by diseased kidneys. The case was an unfavorable one in consequence of this complication. The albuminous character of the urine was supposed to be due to mechanical interference by the enlarged womb, but, unfortunately, this was not so. The bad habits of the patient had led to a general disease of the arteries as well as of the kidneys. The former were atheromatous. The Porro-Müller operation had been performed thirty-four times; the unmodified Porro, eighty-two times; total, one hundred and sixteen cases, of which forty-eight per cent. had been successful in saving the lives of the mothers. When the pedicle or stump was dropped, it ceased to be a Porro operation. Of thirteen cases in which the stump had been dropped, eleven have been fatal. Dr. Godson was now writing a full history of this operation, including the many experiments which had been made on animals to determine the best method for each step of the operation and the causes of death. Dr. Porro had saved four out of five patients in his own hospitals. In the Milan Hospital nine were saved out of twelve. In Germany the success has been poor, but in Austria better.

Dr. O'HARA asked why the Porro operation should be modified when it had been so successful in the hands of the originator.

Dr. HARRIS: Dr. Müller was called upon to operate in a case in which the fetus had been dead for some time and was putrid, the uterus being distended with gas. To prevent any septic matter finding its way into the abdominal cavity, he enlarged the abdominal incision, lifted the uterus out of the abdomen, and used cloths around it and over the wound before incising the uterus. This patient recovered. The mortality this year has been very slight.

Dr. E. E. MONTGOMERY had been associated with Dr. Parish in this case, as one of the hospital staff, and at first thought the patient should be allowed to go on to full term before operating, and that Cæsarean section or laparo-elytotomy, as practiced by Dr. T. G. Thomas, should be the form of operation selected; but Cæsarean section had been very fatal in large hospitals, doubtless because it was generally a last resort after the patient has been long hours in labor, and for that reason was dangerous. But, if a large drainage-tube was passed through, entering at the abdominal incision and coming out of the vagina, and a constant flow of antiseptics was kept up, a good condition might be secured. During the operation a few modifications suggested themselves. One of these was to divide the cervix uteri by a V-shaped incision, the peritoneal surfaces being united over the wound, a flat Peaslee drainage-tube being introduced, and the stump dropped. Dr. Harris had told him that Schroeder had tried this, and that it had been done twice by another operator, once successfully. He thought the wire of the écraseur passed around the cervix before removing the child was a source of danger to the latter, besides being likely to embrace a loop of intestine.

Dr. HARRIS, in criticising the plan of dropping the stump, called attention to the fact that the portion of uterus embraced in the ligature was not a pedicle; it was a stump, and would continue to contract, and oozing of blood, or even profuse hæmorrhage, was liable to occur. It had been found impossible to prevent this by any form of ligature that had been tried. If

the stump was dropped, this hæmorrhage or oozing would take place into the abdomen and would be a certain cause of death. Dr. Isaac E. Taylor came near success, but his patient died from thrombosis on the twenty-sixth day, during an attack of phlegmasia alba dolens. It would be very desirable to avoid the dragging on the abdominal wound.

Dr. MONTGOMERY gave a short *résumé* of the cases treated by dropped stump, and the causes of death in them.

Dr. PARISH remarked that the disease of the kidneys was undoubtedly the cause of death, the implanting of the acute condition caused by pregnancy upon the previous chronic disease. He also spoke of the possible deleterious effect of the ether upon the system laboring under such a condition of the kidneys. It made the administration of ether in such cases a very serious matter.

EXTRA-UTERINE PREGNANCY.—Dr. PARISH also exhibited specimens from a case of this sort, and made some remarks upon the history of the case. He had attended the patient in her first labor, seven years ago. She was a brunette, of very restless and active habits and disposition, and was quite uncontrollable. She was up and about her house a few days after her labor, and the result was subinvolution, which persisted until her death; during the interval she had passed out of his care and had been subjected to local treatment, including the use of sponge tents. There had developed pelvic inflammation, and afterward she was troubled with frequent micturition and dysmenorrhœa. She afterward came under his care again for treatment of these troubles, and on one occasion he had applied leeches to the cervix and given her positive orders not to leave her bed; but festivities were going on, and she went down and assisted in making ice-cream and cake, and also in eating them. This indiscretion was followed by a second metritis. He afterward treated her for the dysmenorrhœa by numerous minute punctures of the cervix, the application of tincture of iodine, and the introduction of a sponge tent. The next period was not so painful, and the second was missed. He told her she was probably pregnant, but two weeks later a slight show occurred, and, fearing an abortion, he advised rest in bed. She refused an examination, and would not be quiet: the flow continued, but did not increase, but there was pain in the pelvis in addition. Eleven days after the flow commenced a sudden attack of intense pain occurred; the patient was completely prostrated, and was carried up stairs. As he was not at home, Dr. O'Hara was called in and used morphine hypodermically. He found, on examination, a mass in the posterior part of the pelvis; the uterus was pushed forward against the pubes. He diagnosticated rupture of a Fallopian pregnancy cyst and internal hæmorrhage, and gave opiates to relieve the intense pain. The pallor and exhaustion became more pronounced, and death occurred thirty hours after the first symptom. Other physicians who saw the patient did not agree with Dr. Parish in his diagnosis. The autopsy revealed no recent peritonitis; there was blood in the pelvic and abdominal cavities, which had escaped from a ruptured cyst of the Fallopian tube. The fœtus exhibited was found in the pelvic cavity. The position of the cyst was such that it would have been an easy operation to open the abdomen and ligate and remove the cyst, and empty and cleanse the pelvic cavity. The Fallopian tube involved was dilated except at the uterine extremity. The other tube was occluded at the fimbriated extremity; inflammatory bands deranged the relations of the different pelvic organs. We had here the history of inflammatory processes changing the epithelial linings and the relations of the Fallopian tubes to the uterus and ovaries as predisposing causes of extra-uterine pregnancy.

Dr. HARRIS remarked that the hæmorrhage after conception, the peculiar location of the pain, and the pallor, made the

diagnosis an easy one. He had had one patient that recovered spontaneously. The operation suggested by Dr. Parish had been performed once successfully. Dr. T. G. Thomas once made the diagnosis and wished to operate, but the husband, a physician, differed in opinion and would not consent; that patient lived sixty hours after the accident. Dr. Playfair in his book advised the operation.

Dr. O'HARA had seen the case early, but could not make such a diagnosis; he saw no sign of internal hæmorrhage then. He thought of peritonitis or cellulitis; there had been no history of a cast of the uterus. He did not see how a positive diagnosis of extra-uterine pregnancy could have been made at that time. The patient was certainly going to die, and he would approve of an exploratory operation.

Dr. PARISH remarked that Dr. O'Hara was perhaps right. He (Dr. Parish) was the only physician present who looked at the case in that light, all the others disagreeing and giving their reasons. If this diagnosis of a probable extra-uterine foetation had been made early, before the accident, then, when the acute symptoms supervened, a quick diagnosis could have been made as to the cause of the pain. He described a fold of peritonæum found behind the uterus, and, as the clot had the appearance of different ages, portions being yellow, he suggested that an extra-peritoneal hæmorrhage had first occurred under this fold, perhaps ten days before the intra-peritoneal hæmorrhage which was the cause of death.

W. H. H. GITHENS, M. D., *Secretary*.

NEW YORK MEDICAL AND SURGICAL SOCIETY.

A STATED meeting was held May 12, 1883, Dr. T. M. MAR-KOE Chairman.

A CASE OF SPINAL DISEASE PURSUING A SOMEWHAT UNUSUAL COURSE.—Dr. FRANCIS DELAFIELD reported a case as follows: The woman was a hospital patient, a girl about twenty years old, a prostitute, who, in April, 1881, gave well-marked symptoms of constitutional syphilis. About the 8th of January, 1882, she had a well-marked hysterical attack, lasting most of the day. Two days later she began to lose power in the legs, first in one and then in the other. By the 8th of February, when she entered the hospital, motor paralysis in both legs was almost complete. There was also well-marked diminution of sensation in the legs, and the bladder and the rectum were paralyzed. It seemed doubtful whether the case was one of hysteria, of transverse myelitis, or one presenting symptoms dependent upon syphilitic poison. Iodide of potassium was administered in large and increasing doses. Improvement took place rapidly, so that on the 16th of February, eight days afterward, she was able to walk about the ward with assistance; the urine could be retained, and sensation returned. The diagnosis was now still more doubtful. The improvement seemed to have been too rapid to indicate syphilitic paraplegia, although it had taken place under antisiphilitic treatment. The patient remained in the hospital until the following October, continuing to take the iodide, and sometimes feeling a little better, sometimes a little worse, but ever able to walk. At that time she considered herself well enough to return to a man with whom she had lived as a mistress, and while there she ceased taking the drug. Loss of power soon returned, and became worse and worse, until on the 31st of December, when she again entered the hospital, paraplegia was complete; she was anæmic and emaciated, two bed sores had formed which refused to heal, and her general condition was very deplorable. She died on the 25th of March. There had been no paralysis of the upper extremities.

At the autopsy, no lesions were found, except in the spinal

cord and large bed sores. The spinal cord was apparently normal when examined by the unaided eye and by the touch; but the microscope revealed the ordinary lesions of transverse myelitis, beginning in the lower part of the brachial enlargement and extending downward a distance of about two inches. There was no evidence of a gummy tumor. In the light of the post-mortem examination, the case was one of a disease well known not to be amenable to treatment, which, however, did improve for a time, apparently, from the use of the iodide of potassium.

Dr. A. C. Post remarked that an eminent surgeon of this city, deceased, suffered from partial paraplegia and pain in the small of the back, supposed to be due to syphilitic poison, and it was apprehended that it would become worse; but, under the use of the waters of Sharon, improvement took place. The iodide of potassium had failed to give benefit.

DIVISION OF THE MEATUS URINARIUS FOR THE RELIEF OF LOCOMOTOR ATAXIA.—Dr. F. N. OTIS related the following case, which was suggested by that of Dr. Delafield: Two years ago a gentleman from the country consulted him with regard to incontinence of urine and some loss of motor power in the lower extremities. He was requested to see Dr. Scguin, who gave a somewhat elaborate written opinion of his condition, pronouncing it undoubted locomotor ataxia, and giving a very unfavorable prognosis. He recommended the administration of large and increasing doses of ergot, and, if convenient, a course of treatment by the galvanic cautery. Dr. Otis recognized contraction of the meatus urinarius, and divided it, with the effect of producing almost immediate relief from the urinary symptoms. There was no history of syphilis, but, having recently read an article on locomotor ataxia in which the iodide of potassium was highly recommended in the treatment, he administered the drug, and within a short time the man began to show decided improvement in the motor symptoms, and was at present almost perfectly well, and able to attend to his business as a gentleman farmer. Dr. Otis remarked that he had never failed in such cases to produce benefit by the division of the strictured meatus if it existed.

ASPHYXIA FROM FOOD ENTERING THE LARYNX DURING ETHERIZATION; TRACHEOTOMY.—Dr. H. B. SANDS related the following case: Two weeks ago he was performing an operation for necrosis of the tibia in a child five years old while it was under the influence of ether. When he had completed the operation and was about to remove the Esmarch bandage, the gentleman who was administering ether called his attention to the fact that the child was breathing badly. Pulling the jaw forward failed to give relief. The jaws were firmly closed, and it was with difficulty that the tongue was seized with the forceps and pulled forward. Asphyxia became more and more marked, the muscles were all quite relaxed except those of the jaw, breathing had entirely ceased. Dr. Sands hastily, with two incisions, cut into the trachea. Considerable hæmorrhage occurred, but the child was turned on its face, the tips of the fingers were inserted into the incision made and the edges separated, and slight respiration took place. In a moment the crisis was over, the child breathed pretty well, and he was able to insert a tube. Through the tube a considerable quantity of boiled egg found exit, and afterward two pieces of meat, each about half an inch in diameter, and supposed to have been ejected from the mouth, were found upon the pillow. The tube was removed the next day, and the child had done perfectly well since. Instructions had been given not to allow the child to have any solid food after 8 A. M. The operation was done at 2 P. M. It occurred to him now that a longer interval should exist between the taking of food and the performance of the operation. This was the first time that the accident had happened in his experience. It was evidently due to asphyxia, and not to the influence of the

anæsthetic upon the heart. The face was livid, not pale, and attempts were made at respiration, but without effect. He supposed that in such a case the heart would have been found beating, and that life would have lasted for a number of minutes after respiration had ceased. Dr. Briddon had shown to the Pathological Society a number of years ago the larynx of a child that had died in the dentist's chair, and it was said that death did not occur until quite a number of minutes after the bad symptoms were noticed, but the nature of the symptoms was not understood, and the child died asphyxiated. At the autopsy a piece of liver was found in the interval between the vocal cords, completely obstructing the larynx.

Dr. Post asked if it was not unlikely that food would remain in the stomach so long a time as in the case just narrated without being digested.

Dr. SANDS said that in the adult the anxiety regarding the operation not infrequently delayed digestion for some hours.

Dr. DELAFIELD and Dr. WALKER remarked that they had observed curdled milk on using the stomach pump more than three hours after the milk had been taken.

BRONCHIAL HÆMORRHAGE WITH UNUSUAL SYMPTOMS.—Dr. B. W. MCCREADY said that, on the 25th of April, 1883, he was sent for in great haste to see a woman who was said to have hæmorrhage from the lungs. On his arrival, ten minutes afterward, he found a woman, seventy years of age, previously in good health, who had been spitting blood, whose pulse was very rapid and feeble, the respiration frequent, the face pale. Nothing abnormal could be detected over the right side of the chest. Over the left side there were no signs of breathing; it was perfectly flat on percussion from summit to base. The same signs were obtained anteriorly and posteriorly. The heart was not displaced; the intercostal spaces were depressed as usual. There were no signs of pleurisy or any effusion. Dr. Delafield saw the patient with him the next day and confirmed the foregoing statement, but he believed there must have been fluid in the chest, although the only sign thereof was flatness. Two mornings later he was again summoned to the patient, who had again been spitting blood. The nurse showed him a number of blood-clots, one of which, on examination by Dr. Delafield, proved to be a cast of a bronchus and several of its terminal ramifications. The circumference was formed of laminated fibrin of a yellowish color, and in the center was loosely coagulated blood. Upon examining the patient again, the lung upon the left side was found more resonant; air entered it imperfectly. The pulse was still frequent, and the patient felt much depressed. She continued to spit a few small clots of blood for a day or two; but strength gradually returned, the cough disappeared, the pulse had become normal, breathing was re-established in the left lung—although it was not yet vesicular in the lower portion—and she expressed herself as being comfortable.

Dr. DELAFIELD remarked that the blood which was coughed up after that which formed a cast of the large bronchus consisted of casts of small bronchi. There was no membrane surrounding the large clot which would indicate any inflammatory process. It was not unusual for hæmorrhage to take place from a bronchus, from the mucous membrane, from small cavities, or from an aneurysm; but, as a rule, in such cases most of the blood was coughed up, or, if not, it entered the smaller bronchi and the air vesicles; it did not remain in the larger bronchi and form a firm clot, to be expectorated in that form. Should a clot form within the larger bronchus and occlude its lumen, air could not, as a matter of course, enter the lung; but how complete flatness on percussion could be produced thereby he could not understand. As soon as the cast of the large bronchus had been coughed up, flatness and dullness began immediately to disappear.

Dr. McCready added that two brothers and two sisters of the patient died of tubercular trouble occurring after the fortieth year of age. This patient gave no symptoms of tuberculosis.

MILIARY TUBERCULOSIS.—Dr. R. WATTS was asked, about the 1st of April, 1883, to see a man, forty-seven years of age, who had come down to the city from the country, where he had been suffering from intermittent fever. There was considerable prostration, loss of flesh, loss of appetite and disturbance of the stomach, chilly sensations and fever in the afternoon. No dullness could be detected over the lungs, except a slight amount under the clavicles; there were coarse bronchial râles, and it was supposed that the patient had no other trouble with the lungs than a bronchitis. He was advised to leave the hotel at which he was staying, and he went to Atlantic City; and soon afterward reported that his cough had entirely left him, and that for a few days he had had no fever, and his general condition had improved; and he was riding about shortly afterward. Dr. Watts saw his death announced in the papers, and he learned that one night, after having been out driving in the afternoon, his breathing suddenly became difficult, and in the course of a few hours he died. An autopsy was made by Dr. Welch, at which Dr. Watts was present, and it was found that both lungs were consolidated with miliary tubercles, and the liver, the kidneys, the intestines, and the mesenteric glands, were also densely studded with them.

Reports on the Progress of Medicine.

GENERAL MEDICINE.

By ALEXANDER DUANE, M.D.

THE RELATION OF MICRO-ORGANISMS TO TUBERCULOSIS.—Dr. W. W. Cheyne's report ("Practitioner," April, 1883) is a valuable contribution to our knowledge of the nature of tuberculosis and its bacillary origin. The first part of the paper is taken up with an interesting description of the author's visit to the laboratories of Toussaint, Schüller, and Koch, and of his own observations of their methods of work. He was evidently impressed with the superiority, both in point of accuracy and thoroughness, of the researches carried on by Koch. By the latter, as well as by Toussaint, he was given specimens of their work which he brought home, and upon which he made numerous experiments, the results of which are detailed. All his experiments, which are numerous and appear to be well conducted, point to one conclusion, viz.: The micrococci, which Toussaint described as the cause of tuberculosis, were absent from the tissues of tuberculous animals obtained from his own laboratory, *when these tissues were examined with proper precautions*, and, further, the injection of cultivated micrococci obtained from his laboratory failed in every case to produce tuberculosis; on the other hand, tuberculous material, whether obtained from Toussaint's or Koch's laboratory, universally contained Koch's bacilli, and the injection of these bacilli, and of their cultivations, produced tuberculosis in previously sound animals. Among the specimens examined were a number of human tuberculous and scrofulous organs and tissues (phthisis with excavation, fibroid phthisis, strumous articular disease, scrofulous lymphatic glands, tuberculous kidneys, testicles, etc.). In these the number of bacilli present appeared to bear a relation to the intensity of the morbid process, the greatest number being found in cases of acute miliary tuberculosis, while in cases of fibroid phthisis which had become stationary the bacilli had disappeared or were very few. The conclusion which Cheyne draws from

these observations is that pulmonary phthisis, whether acute or chronic, is always caused by the inhalation of bacilli, which arrive in the alveolar epithelium, there lodge, proliferate, cause surrounding destructive changes, and so extend to other alveoli. If the surrounding reactive inflammation is intense, and the growth of the bacilli rapid, caseation and excavation take place; if the contrary is the case, connective-tissue formation occurs about the focus of irritation, and we find the changes of fibroid phthisis.

While lodged in the alveolar epithelium, the bacilli are not in direct relation with the blood-vessels, and hence can not have access to the circulation; when, by wandering from their place, they do penetrate the vascular walls and enter the circulation, the phenomena of general tuberculosis are developed. An interesting example of this is furnished by one of the specimens from Koch's laboratory.

To the objection which has been raised against the specific character of tuberculosis, that the inoculation of non-tuberculous material will produce the disease in rabbits and similar animals, Cheyne declares that this never takes place if proper antiseptic precautions are taken at the time of introduction of the foreign bodies. He himself has introduced the most varied forms of irritants (altogether in nearly a hundred cases), without in a single instance inducing tubercular lesions. Occasionally, single cheesy nodules resembling tubercles were observed, but these, on microscopic examination, turned out to be simple inflammatory foci, in most cases dependent upon the presence of parasites.

For details as to methods of work, and reports of the different cases, we would refer the reader to the original, which he will find well worth his perusal.

ACUTE CIRCUMSCRIBED CUTANEOUS EDEMA is the name given by Quinke ("Edinburgh Medical Journal," June, 1883) to a diseased condition in which cedematous tumefactions, circumscribed in character and appearing and disappearing quite suddenly, develop in the loose subcutaneous tissue in different parts of the body, but especially upon the extremities about the joints and upon the face about the lips and eyelids. They may also appear upon the mucous surfaces. These tumefactions are not inflammatory in character, give no pain, and seldom itch. One attack lasts from a few hours to a few days, but may be protracted by the occurrence of successive relapses. The affection once established is liable to recur. Jamieson, in his paper upon the subject, gives an account of one case which he has observed, with reminiscences of similar cases which probably might be brought under the same category. Similar cases have also been described by Milton, Landon, Duhring, and Kemper. Jamieson relates a case in which *pulmonary* edema suddenly developed and as suddenly disappeared in a healthy woman, and believes that this case is an illustration of a variety of morbid action similar to that which obtains in the malady described by Quinke. He believes that all such cases should be referred to a neurotic source, and thinks that an outbreak such as they represent is really a "nerve-storm," an explosion of nerve-force due to "a periodically recurring instability of equilibrium in the nervous system."

THE CAUSES OF CONVULSIONS IN CHILDREN.—Kjellberg, in an interesting article on convulsions in children ("Archiv. für Kinderheilkunde," iv, 1883), classifies the former into symptomatic and sympathetic. Symptomatic convulsions are due to direct irritation of the "convulsion center" in the medulla oblongata, and may be brought about either by changes in the amount of blood supplied to the brain or by alterations in the quality of the blood. Changes of the former kind occur as the result of anæmia (which to produce convulsions must be sudden in its development), active (fluxionary) hyperæmia, and passive

(venous) hyperæmia. Anæmia of the brain, again, may in children be due to sudden hæmorrhage, to excessive loss of fluid in diarrhœa or vomiting, to arterial spasm, to compression of the skull from without, to intracranial pressure from external changes in the brain itself, and to the effect of certain general diseases. Active hyperæmia, which, as the author points out, really produces cortical anæmia by constriction of the cerebral capillaries due to the reactionary pressure exerted upon them by the circumvascular lymph-fluid, occurs very frequently in children, and is brought on by anything which will increase the heart-action—emotion, the febrile state, etc. Passive hyperæmia of the brain occurs in children as the result of laryngeal or intra-thoracic obstruction to the entrance of air, or of cardiac disease or of distention of the stomach exciting both respiratory and cardiac embarrassment. Changes in the character of the blood supplied to the brain, constituting the second class of causes producing convulsions by direct irritation of the medulla, are themselves induced either by pyrexia, by the introduction of toxic substances (atropine, tobacco, alcohol, poisonous gases) from without, or by the development of poisons within the circulation (pyæmia, cholæmia, etc.). Whether the uræmic poison acts directly upon the medulla, or indirectly by its effect in causing cerebral anæmia, is uncertain. The second great division of causes which may produce convulsions includes all agents acting upon the peripheral nerves and producing spasm by reflex irritation (sympathetic convulsions). Such causes are found in irritation due to wounds, burns, and other lesions of the integument, foreign bodies in the ear and nose, renal calculus, etc. By far the most frequent seat of irritation, however, is found in the alimentary tract. Among other causes included under this latter head the author considers to which great importance used to be ascribed—namely, teething and the presence of worms in the intestines. Both, he thinks, have their influence, which it would be wrong to deny absolutely, as some have done, but this influence is certainly pretty limited, and he especially warns us against ascribing every attack of convulsions in children who have worms to the account of the latter. The author believes that a hereditary predisposition exists in some cases to account for the convulsions. In other cases convulsions are simulated, and the detection of the imposture may be quite difficult. It is worthy of remark that Kjellberg, in giving a reason for the prevalence of convulsions in childhood, ascribes it not to an excessive excitability of the nervous centers, but to a deficient activity of the cerebral centers which inhibit reflex activity.

DIPHtheritic NEPHRITIS.—Fürbringer's paper ("Archiv für pathologische Anatomie und Physiologie und für klinische Medizin," xci, 3) consists in an analysis of the urinary symptoms and the results of the post-mortem examination in ten fatal cases of diphtheria, together with a comparison of his results with those of other investigators. The pathological changes occurring in diphtheritic nephritis are, according to some, a hyperæmic and hæmorrhagic condition of the kidney with extensive tubal and interstitial changes (Oertel); according to others, extensive fatty degeneration evidenced macroscopically by the presence of a large yellow or yellowish-white kidney (Weigert); while, according to a third party, the renal changes in diphtheria are found principally in the tubes of the cortex, the glomeruli and interstitial tissue being little involved, and the organ itself slightly enlarged, rather soft and pretty anæmic (Wagner). From his own examinations, Fürbringer believes that the hyperæmic forms described by some are only the results of renal congestion, and that the essential lesions referable to the diphtheritic process are to be classified under three heads, representing as many different stages of the inflammatory process. These are as follows: 1. Gross appearance of kidney normal, cortex anæmic. Parenchymatous degeneration of cortical epi-

thelium. This form resembles closely the form of renal lesion found in pyretic conditions. 2. Cortex slightly enlarged and anæmic; cut surface rather granular; extensive degeneration of the cortical and glomerular epithelium; beginning interstitial changes; no vascular lesions. 3. Large yellow kidney, with extensive fatty degeneration and advanced alterations of interstitial tissue; a form resembling that found in scarlet fever. In no instance among the author's cases has he found micrococci in the kidney, at least in quantity sufficient to convict them of producing the renal lesions by their direct local influence. Fürbringer, accordingly, while acknowledging the power of the micrococci as carriers of the diphtheritic contagium, and as the indirect source of all the lesions of the disease, does not believe that they can exert any immediate mechanical or chemical effect upon the renal tissues. He seems to have used a good deal of care in reaching this result, to secure it from the suspicion which naturally rests upon all purely negative determinations. In the urine also, while casts, renal epithelium, and leucocytes were constantly present, micrococci were universally absent. The characteristic symptoms of renal involvement in diphtheria, as judged from his cases, were a diminution in the amount of urine so great as not to be explained either on the ground of simple renal congestion or of the pyrexia, and not associated with a high specific gravity or a deep color, and albuminuria varying in degree with the intensity of the general symptoms; with these were joined the negative symptoms of absence of œdema and of cardiac hypertrophy.

CARDIAC THROMBOSIS IN ACUTE DISEASES.—Goodridge ("Practitioner," June, 1883) believes, in common with some of the more recent writers, that cardiac thrombosis may act as a cause of death in acute disease, and not occur merely as a preagonic phenomenon. He bases this opinion upon the history of three cases in which death occurred with a greater or less degree of suddenness, and with attendant symptoms of dyspnea, thoracic oppression, rapidly diminished heart-power, and a sense of impending dissolution. In these cases there were found, post mortem, firm, decolorized fibrinous coagula, occupying, in one case, the left ventricle and the beginning of the aorta, in another case extending from the right ventricle into the pulmonary artery, and in the last case blocking up the right auricle and the superior vena cava. In the latter case the fibrinous coagulum was distinctly laminated in structure, and the character of the symptoms pointed to a progressively increasing interference with the function of the right heart.

Miscellany.

THERAPEUTICAL NOTES.—*The Therapeutic Use of Chloroform-Water.*—M. Pierre Vigier calls attention ("Gazette hebdomadaire de médecine et de chirurgie," August 31, 1883) to the therapeutic value of *eau chloroformée*. This preparation is much more stable than chloroform itself. Chloroform, chemically pure, if submitted to the action of the sun,* is decomposed, with the production of chlor-carbonic gas, in forty days, while chloroform saturated with water resists decomposition a hundred days, and chloroform water, placed under the same conditions, remains absolutely in a state of purity. Physicians can, then, rely on the purity of this new medicament. To prepare chloroform-water, add pure chloroform in excess to a flask three quarters full of distilled water, shake the mixture from time to time for an hour and allow the excess of chloroform to settle until the liquid above is perfectly clear. The two are then separated by decantation. The mixture contains 0.90 gramme of water to 1.00 gramme of chloroform. When

* *Soumis à l'insolation directe ou diffuse.*

of this strength the solution is too irritant to be well borne by the stomach, at least at first. It must, therefore, be diluted. The dilution may be made with water. Chloroform water, it is said, is a valuable antispasmodic. It gives excellent results in vomiting of nervous origin, and in the vomiting of pregnancy. It allays the pains and nauseous sensations experienced by patients suffering from dilatation of the stomach. Besides being a calmant, it tends to check fermentation. It forms an excellent vehicle in which various medicaments may be given, as, for example, the bromides, salicylate of sodium, chloral hydrate, perchloride of iron, morphine, etc. With it the administration of gamboge may be kept up indefinitely in cases requiring an efficient hydrogogue cathartic. The following is a good formula: R Chloroform-water, saturated, 100 grammes; water of orange flowers, 50 grammes; gamboge, 1 gramme. Emulsionize thoroughly. Sig. A tablespoonful in the morning every day or every other day.

The Treatment of Diphtheria with Blue-Gum Steam.—J. Murray Gibbs, M. D., M. C., of New Plymouth, New Zealand, advocates strongly ("Lancet," September 1, 1883) the treatment of diphtheria by inhalations of steam obtained from the dried leaves of the blue-gum tree (*Eucalyptus globulus*). "Two of my colleagues in New Plymouth have informed me that they lost all their bad cases of diphtheria in the same epidemic that I saved all (save one) of mine; therefore I feel perfectly justified in saying that in *Eucalyptus globulus* we have a cure for diphtheria." Dr. Gibbs prints notes of the cases of thirty-seven patients treated by him with blue-gum steam, all but one of which recovered. This single death was attributed, not to inefficacy of the mode of treatment, but to inability of the parents to attend to the patient properly. Their eight children all had the disease, six of them being sick at one time. Dr. Gibbs afterward visited France to observe the treatment of diphtheria in the Paris hospitals, and to learn the results obtained. In two wards of the *Hôpital des enfants malades* devoted specially to diphtheritic patients, despite good attendance, ventilation, etc., the recoveries were but one in five. In six months, of 151 patients on whom tracheotomy had been performed, 42 recovered. The mortality was greatest in cold weather. The windows were kept open, and the temperature (on the day of Dr. Gibbs's visit) was so low as to chill one on entering the wards. The atmosphere was fumigated with a mixture of eucalyptus oil and tar kept hot by means of a lamp. Local applications to the throat were made with "diphtheritic oil," composed of salicylic acid, alum, borax, and eucalyptus oil. The criticism of Dr. Gibbs on this treatment is that the temperature of the wards was much too low, and that the eucalyptus was not so used as to get the benefit of its curative properties. The various preparations of eucalyptus, such as the tincture and the essence, applied with a spray apparatus, would not produce the results obtained by the steam made from the dried leaves and boiling water. The hot steam acts like a poultice. It soothes and allays the inflammation and promotes the speedy and natural separation of the false membrane, as scabs may be loosened by poulticing. When the membrane is loose it is to be gently removed with a soft brush, and the part beneath burned at once so that it can not spread the disease. Removal of firmly attached membrane, as is often practiced, wounds the parts, and promotes the absorption of the poison by the blood. Occasional inhalations are as useless as occasional and desultory poulticing of any other inflammation would be. There must be an atmosphere of steam which the patient must inhale uninterruptingly. "One breath of cold air will undo hours of improvement."

Steam inhalations have long been used in the treatment of diphtheria, but, while any steam would "act as a poultice," Dr. Gibbs maintains that steam impregnated by his method with the medicinal principles of the eucalyptus exerts a special—not to say "specific"—action on the disease. "*Eucalyptus globulus* contains properties which are perfectly antagonistic to the germs of diphtheria." In none of the cases cited did paralysis or other unfavorable sequelæ occur. No stimulants or other internal remedies were required, nor were disinfectants used. The soft brush used to remove the loosened membrane was previously saturated with a weak solution of iron in glycerin, and the denuded surfaces were carefully cauterized. These were the only measures resorted to in addition to the blue-gum-steam inhalations.

The success of the treatment, Dr. Gibbs states, is largely, if not wholly, a question of attention to minute details.

The Medicinal Value of the Salts of Nickel.—Professor J. M. Da Costa, of the Jefferson Medical College, Philadelphia, concludes in a "preliminary paper" ("Medical News," September 29, 1883), after a year's experimentation, that "the preparations of nickel, especially the bromide, will be found additions to our therapeutic resources, and are certainly worthy of more careful study than they have hitherto received." Investigations were made with the chloride, acetate, phosphate, sulphate, and bromide. The sulphate and the bromide proved to be the best preparations. The sulphate used was made by digesting nickel filings in dilute sulphuric acid and evaporating. The salt is chrome-green in color, very deliquescent, and very soluble in water. It was given in solution or in pill, in from one- to three-grain doses. Small doses were well borne by the stomach. Five grains sometimes caused giddiness and nausea. There was little action on the pulse or temperature; if anything, they were slightly reduced. The salt was somewhat sedative and anodyne, but not directly soporific in its properties. There was little evidence of its reputed tonic effect. In obstinate diarrhœa excellent results were obtained from small, frequently repeated doses, or from one- to two-grain doses given four times daily. In one such case, associated with valvular disease of the heart and with the trembling of beginning sclerosis, it was successful after many remedies had failed. It subsequently benefited the heart trouble, but not the nervous affection. In chronic catarrh of the stomach the sulphate acted well and the chloride even better. "In the case of a professional man with marked indigestion and some albumin in the urine, in whom iron produced headache and otherwise disagreed, the digestive disorder was speedily influenced and the albumin disappeared while taking one grain of the chloride three times daily. More than this did not agree."

Bromide of nickel, a green, deliquescent, very soluble salt, was obtained by digesting nickel filings in bromine and water, and evaporating carefully to crystallization. It acted similarly to the other bromides, but much smaller doses would suffice. Five to seven and a half grains proved an average dose; ten, a decided one. If ten grains ever disagreed, one half the quantity was given, and soon repeated. Bromide of nickel was found to allay headache, especially of the congestive form, to relieve convulsive movements, and to act as a general sedative to the nervous system. In epilepsy it was found in all cases to act quite as well as any bromide, "and, as happens with all, we sometimes by a change to it obtain results which the others no longer yield." From the "illustrative" cases detailed, it would seem that in intractable epilepsy, in one instance, when the other bromides and several other remedies were ineffectual, the bromide of nickel, in from five- to ten-grain doses, was markedly beneficial, especially at first. The drug appears to lower the temperature slightly, and, possibly, to reduce the frequency of the pulse a trifle. It does not act on the skin or bowels, or on the composition of the urine, the quantity of which may be unchanged or slightly increased. The results from a dose smaller than that of the bromides generally used are striking. Nor can they be accounted for by the presence of a greater percentage of bromine. The combining weight of nickel is between the combining weight of sodium and that of potassium, the three being, respectively: sodium, 23.3; nickel, 29.5; potassium, 39.2. There must be, therefore, some special action in the bromide of nickel.

The sulphate and chloride of nickel diminished somewhat the number of the epileptic attacks, but, while they were not inert, their controlling action is slight compared with that of the bromide.

Bromide of nickel was given in solution or in pill form, made with gum tragacanth. The preparations used were made with great care by a skilled pharmacist, Mr. McKelway, and were chemically pure.

Serpent-Venom as a Remedy for Tetanus.—A. O. Ameden, M. D., of Glens Falls, N. Y. ("Medical News," September 29, 1883), reports the successful treatment by serpent-venom of a severe case of tetanus which refused to yield to other remedies. The patient was a healthy laborer, about twenty-five years old. A punctured wound of the foot was followed in three days by tetanic symptoms, which rapidly assumed a most aggravated form. Chloroform, chloral, and bromide of potas-

sium were freely used without benefit. The marked contrast in the symptoms and condition caused by tetanus and by snake poisoning led to the conclusion that the two poisons, so to speak, ought to counteract each other. The point of a hypodermic needle was moistened with fresh venom from a rattlesnake (the case occurred in a region infested with rattlesnakes), and the needle thus "medicated" was inserted into the cellular tissue in the upper dorsal region near the spine. Symptoms of snake poisoning came on rapidly, with marked amelioration of the tetanic spasms and rigidity. They entirely ceased in ten hours, and the patient enjoyed six hours' quiet sleep. Thirty hours after the poison was inserted, slight spasms and rigidity returned. The previous procedure was repeated. The tetanus gave no further trouble, and a fairly rapid recovery followed. However, the second introduction of the venom, Dr. Ameden believes, might have been withheld. It caused extreme prostration, and rendered active alcoholic stimulation necessary. Otherwise, the results were all that could be desired. There was no diffuse inflammation in the wounds, or any other unpleasant consequence. Dr. Ameden is of the opinion that snake-venom, or "crotaline," may be used with comparative safety, and may prove a valuable remedy in tetanus and, possibly, in some other spasmodic diseases.

THE NEW YORK POST-GRADUATE MEDICAL SCHOOL.—The order of the clinics and courses for the regular term of 1883-1884 is as follows:

10 to 11 A.M.—*Diseases of Children*: Dr. McNutt, Mondays and Wednesdays; Dr. Jacobi, Tuesdays and Fridays; Dr. S. M. Roberts, Thursdays and Saturdays.

11 A.M. to 12 M.—*Clinical Medicine*: Dr. Porter, Mondays and Saturdays; Dr. Burt, Tuesdays and Thursdays. *Clinical Gynecology*: Dr. Skene, Wednesdays. *Surgical Dressings*: Dr. Powell, Fridays. *Obstetrics*: Dr. Partridge, Tuesdays and Saturdays.

12 M. to 1 P.M.—*Clinical Surgery*: Dr. Little, Mondays, Wednesdays, and Fridays. *Orthopaedic Surgery*: Dr. M. J. Roberts, Tuesdays, Thursdays, and Saturdays.

1 to 2 P.M.—*Clinical Gynecology*: Dr. Dawson, Mondays, Wednesdays, and Fridays. *Diseases of the Eye and Ear*: Dr. Moore, Tuesdays, Thursdays, and Saturdays (at the New York Eye and Ear Infirmary).

At 2.30 P.M.—*Diseases of the Throat and Nose* (hospital clinics): Dr. Whiting, Mondays, Wednesdays, and Fridays; Dr. Wagner, Tuesdays, Thursdays, and Saturdays (at the Metropolitan Throat Hospital). *Diseases of the Eye and Ear*: Dr. Roosa, Tuesdays, Thursdays, and Saturdays (at the Manhattan Eye and Ear Hospital). *Normal and Pathological Histology* (laboratory): Mondays, Wednesdays, and Fridays.

3 to 4 P.M.—*Skin Diseases*: Dr. Sturgis, Mondays, Wednesdays, and Fridays.

4 to 5 P.M.—*Diseases of the Mind and Nervous System*: Dr. G. M. Hammond, Mondays; Dr. Dana, Tuesdays and Thursdays; Dr. W. A. Hammond, Wednesdays, Fridays, and Saturdays. *Diseases of the Eye and Ear*: Dr. Moore, Mondays, Wednesdays, and Fridays.

5 to 6 P.M.—*Pathology and Clinical Medicine*: Dr. Satterthwaite, Mondays, Wednesdays, and Fridays; Dr. Smith, Tuesdays and Thursdays.

7 to 8 P.M.—*Veneral Diseases*: Dr. Lyttle, Tuesdays and Thursdays.

8 to 9 P.M.—*Anatomy and Physiology of the Nervous System*: Dr. Spitzka, Wednesdays and Fridays.

Courses in operative surgery and in ophthalmoscopy will be held in the evening.

CLINICAL LECTURES ON DISEASES OF THE SKIN.—Dr. Bulkley's seventh free course at the New York Hospital began on Wednesday, the 17th inst., and will continue every Wednesday, at 2.30 P.M., until twenty lectures have been given.

ABSCESSES OF THE NECK WHICH MAY CAUSE SUDDEN DEATH.—The late Dr. John A. Lidell ("American Journal of the Medical Sciences," October, 1883) points out that sudden death may occur from deep-

seated abscesses of the neck, or the continuance of life may be greatly endangered, much oftener than is generally supposed, and that these abscesses in the neck are more frequently attended with hemorrhages due to the opening of important blood-vessels by ulceration or erosion, and by *ramollissement* consequent upon the disorders themselves, than abscesses in the other surgical regions. The superior liability of cervical abscesses to the spontaneous occurrence of dangerous hemorrhages arises in part from the greater number and importance of the cervical blood-vessels; but more particularly from the inanition and exhaustion, or low state of the constitutional powers, and consequent feebleness of the reparative forces, which rapidly result from most of the deep abscesses of the neck, or, rather, from the inability to swallow enough food to support life, and from the powerlessness to get any refreshing sleep, or even repose, with which these abscesses are oftentimes attended. The septic or toxæmic influence of the foetid secretions and exudations which present themselves in the oral and faucial cavities in many instances also aids materially to still further depress the patient and weaken the reparative processes of his system. These deep-seated abscesses of the neck, when allowed to run their own course, do not exhibit any tendency to a spontaneous cure; but, on the contrary, they always tend to destroy life by burrowing or spreading, etc.; and Dr. Lidell shows that the earlier they are laid open and evacuated the better for both patient and surgeon.

ARMY INTELLIGENCE.—*Official List of Changes of Officers serving in the Medical Department of the United States Army from October 6, 1883, to October 13, 1883.*—HAMMOND, JOHN F., Colonel and Surgeon. Leave of absence on surgeon's certificate of disability, granted April 2, 1883, extended six months on surgeon's certificate of disability. Par. 7, S. O. 231, A. G. O., October 8, 1883. — SWIFT, EBENEZER, Lieutenant-Colonel and Assistant Medical Purveyor, under the provisions of section 1 of the act of Congress, approved June 30, 1882, is, by operation of law, this day retired from active service, and will proceed to his home. Par. 4, S. O. 231, A. G. O., October 8, 1883. — HARTSUFF, ALBERT, Major and Surgeon. Granted leave of absence for fifteen days. Par. 2, S. O. 205, Department of the Missouri, October 6, 1883. — MEACHAM, FRANK, Major and Surgeon. Assigned to duty at Fort Douglas, Utah. Par. 3, S. O. 109, Department of the Platte, October 6, 1883. — CRONKHITE, H. M., Captain and Assistant Surgeon. Assigned to duty at Fort D. A. Russell, Wyoming. Par. 3, S. O. 109, Department of the Platte, October 6, 1883. — WEISEL, DANIEL, Captain and Assistant Surgeon. Assigned to duty at Fort Fred Steele, Wyoming. Par. 3, S. O. 109, Department of the Platte, October 6, 1883. — ARTHUR, W. H., First Lieutenant and Assistant Surgeon. Assigned to duty at Fort Douglas, Utah. Par. 3, S. O. 109, Department of the Platte, October 6, 1883. — STRONG, NORTON, First Lieutenant and Assistant Surgeon. Assigned to duty at Fort Washakie, Wyoming. Par. 3, S. O. 109, Department of the Platte, October 6, 1883.

NAVAL INTELLIGENCE.—*Official List of Changes in the Medical Corps of the Navy during the week ending October 13, 1883.*—Surgeon Thomas Hiland, granted leave of absence for one year, with permission to leave the United States. — Surgeon William J. Simon and Passed Assistant Surgeon M. H. Crawford, ordered to report on November 1st for duty on board the United States steamer Trenton.

SOCIETY MEETINGS FOR THE COMING WEEK.—*Monday, October 22d*: Medical Society of the County of New York (annual). *Tuesday, October 23d*: New York Academy of Medicine (council); New York Surgical Society; New York Dermatological Society (private); Medical Society of the County of Putnam, N. Y.; Jersey City Pathological Society. *Wednesday, October 24th*: New York Pathological Society; American Microscopical Society of the City of New York; American Association for the Cure of Inebriates (New York); Philadelphia County Medical Society. *Thursday, October 25th*: New York Academy of Medicine (Section in Obstetrics); Harlem Medical Association (private); Brooklyn Pathological Society. *Friday, October 26th*: New York Clinical Society (private); New York Society of German Physicians (private); Yorkville Medical Association (private). *Saturday, October 27th*: New York Medical and Surgical Society (private).

Lectures and Addresses.

A REVIEW LECTURE ON MAGNETISM AND ELECTRICITY,

DELIVERED AT THE COLLEGE OF PHYSICIANS AND SURGEONS,

By CHARLES F. CHANDLER, PH. D.,
PROFESSOR OF CHEMISTRY AND MEDICAL JURISPRUDENCE.

Magnetism.

GENTLEMEN: I will say only a word about magnetism. A magnet is either natural or artificial. A natural magnet is a piece of magnetic iron-ore or magnetic oxide of iron (Fe_3O_4), also called loadstone, and it occurs in nature. An artificial magnet is one produced by artificial means. Artificial magnets are of two kinds—permanent and temporary. A permanent magnet is a piece of steel that has been magnetized by bringing it in contact with another magnet or piece of loadstone, or by passing a strong current of electricity around it. A temporary magnet is a piece of soft iron which has been made temporarily magnetic by being brought near to a permanent magnet, or by passing a current of electricity through a coil of wire surrounding it. The properties of a magnet are: 1. The power of attracting certain metals—iron, nickel, cobalt, and, to a slight degree, chromium, and a few others. 2. The property of tending to assume a certain position as regards north and south. A magnetic bar or needle, if allowed to hang by its center on a string, or to float free on a piece of wood in water, will assume a position approximating north and south, but not exactly so. 3. The property of polarity—that is to say, a magnet exhibits its peculiar attracting powers chiefly at the extremities. There is a center of attracting power near each end, but not absolutely at the end, and at this point or center the magnetic power is strongest. These two magnetic centers are called the poles of the magnet; the end which points toward the north is called the north pole, and the one pointing toward the south the south pole of the magnet. When two magnets are brought near each other, the north pole of one will attract the south pole of the other, and repel the north pole. So it has been found to be a law with magnets that, “like poles repel, and unlike poles attract each other.” With regard to the direction the magnetic needle takes when allowed to move freely, it does not point directly north and south, but it assumes a position pointing a little to the east or to the west of north and south, depending upon the locality at which the observation is made. This is because the magnetic poles in different parts of the earth do not correspond exactly with the geographical poles, and the difference between them varies with the location at which the observation is made. This is why nautical almanacs are made to tell mariners the amount of variation from the true north and south made by the compass-needle in different parts of the world. This deviation of the compass-needle from the true north and south is called the “declination” of the needle. The term “declination” is very liable to be confounded with that of “inclination.” When a bar of steel is hung by a

thread at its center it assumes an exactly horizontal position; but, if this bar of steel is now magnetized, it will assume a direction pointing north and south, but it will no longer hang exactly horizontal except at the equator of the earth. At all points north of the equator the north pole of the bar will dip downward, and the farther north you get the greater will be the dip, while at all points south of the equator the south pole of the bar will dip downward: and the degree to which the needle dips from the absolutely horizontal direction is called its “inclination.” This is because the two magnetic poles of the earth do not correspond to the two geographical poles, but they appear to lie nearer the center of the earth. To overcome this tendency of the magnetic needle to dip at a varying angle according to the distance north or south of the equator, the needle of the mariner's compass is made by uniting two magnetic bars laid parallel, with the north pole of one adjacent to the south pole of the other, so that they lie with their opposite poles end to end. Such a needle is said to be “static.” At a point on the surface of the earth corresponding with latitude 70° N. and longitude $96^\circ 43'$ W. the north magnetic pole seems to be located, and at this place the dipping needle assumes a vertical direction. The south magnetic pole is apparently located at latitude $75^\circ 5'$ S. and longitude 154° E.

The production of magnetism by induction is a curious phenomenon. If a permanent magnet is brought near a handful of iron nails it will attract them to it, and as soon as a nail becomes attached to the magnet it becomes a magnet itself and attracts another nail, which in turn becomes a magnet and attracts another, and so on, the magnetic power of each new nail attracted becoming constantly less than that of the preceding one. It is not even necessary that the nail should absolutely touch the magnet in order to assume this magnetic power, for it will be transmitted through short spaces from one to the other. This power which a body acquires by being brought near a magnet is called “magnetic induction.” An important fact in this connection is that when a coil of iron wire is made to surround a permanent magnet it becomes magnetic itself by induction, and is capable of inducing magnetism in another bar of iron surrounded by it. This principle is made practical use of in the construction of the telephone and magnetic telegraph.

Electricity.

We now come to the subject of electricity. This is a peculiar agent, capable of producing certain astonishing results. There are different forms of electricity and different ways of generating it. The different forms are statical electricity, dynamical electricity, and magnetical electricity, or magnetism. It may be generated by means of friction, percussion, heat, chemical action, cleavage, and by magnets. The effects of electricity in its different forms are manifested as attraction, repulsion, light, heat, violent commotions, and chemical decomposition.

To excite electricity we must always do something, and the first way of producing it, discovered in the earlier ages, was by rubbing amber, and so the term electricity was derived from the Greek word *ἤλεκτρον*, signifying amber.

It was afterward found that certain other substances when rubbed assumed electrical properties, and would attract or repel other materials. This electricity produced by rubbing or friction is called statical electricity. This is a form of electricity that can be held for a considerable length of time, and hence it has received the name of stationary or statical electricity. This is the only form of electricity that we can store up and keep for a time. What is known now as the storage battery does not really store up electricity, but only energy, which can be transformed into electricity at will. So much for statical electricity.

We have a totally different kind of electricity, called dynamical electricity, or electricity in motion. This is a form of electricity that circulates only in a conductor or along a wire, and it can not be held. It was first discovered by Galvani in experimenting on frogs' legs, and hence it is often called galvanic electricity. It is now ordinarily produced by means of galvanic batteries and dynamo-machines. The third form of electricity we have already referred to incidentally as that which is induced by means of magnets, and it is therefore called magnetic electricity, or magnetism.

According to the generally accepted theory, there are two so-called electrical fluids, and these two are commingled in equal proportions in all bodies; and hence all the processes for getting electricity must result in pulling these two electrical fluids apart, and in taking a portion of one away from a body. These two fluids are called, one positive, and the other negative electricity. It is found that when two bodies are electrified with the same kind of electricity, as both with positive, or both with negative, they repel each other; but when the two bodies are charged with opposite kinds of electricity, as one with positive and the other with negative, or when one body is charged with either kind while the other is left in its normal condition, then the two bodies attract each other. Hence we derive the law which states that "bodies charged with like forms of electricity repel, and those with unlike attract." The gold-leaf and pith-ball electroscopes are constructed on this principle.

When a piece of sealing-wax is rubbed, it manifests electrical properties for some time, but certain other substances, like metals, for instance, after being rubbed in the same manner, show no electrical properties, and this is because the electricity easily gets away from them. Thus we find that while certain substances remain electrified for some time others do not, and hence these bodies are named conductors and non-conductors. But these terms are not absolute, but only comparative. The metals, carbon, gypsum, and acids are called good conductors, while amber, glass, sulphur, and silk are poor conductors. If we want to insulate electricity and keep it from running off into surrounding objects, we surround the object containing it with a poor conductor. Thus the glass insulators on telegraph poles prevent the electricity from leaving the wires and running off into the ground, and the non-conducting materials placed around the wires of the Atlantic cable so protect it that a small charge of electricity will carry a message from here to Europe.

Great difficulty is experienced in experimenting with statical electricity because it so easily gets away. All substances are conductors to a greater or less degree, including the dust in the air and the moisture in the atmosphere. Perfect insulation and a warm, dry air are, therefore, favorable conditions for holding statical electricity. The reason it was not used earlier for practical purposes was because it was so difficult to manage. The electricity which is produced on glass by friction is called vitreous or positive, while that produced in the same manner on shellac or sealing-wax is called resinous or negative electricity. Franklin had a theory that there was but one electrical fluid, and that all substances in the natural state had an equal amount of it, but a body charged with an excess of this fluid was said to be in a positive state, and one in which there was a deficiency was said to be in the negative state. But this theory has now given place to the two-fluid one, which maintains that all bodies are charged with an equal amount of the two electrical fluids called positive and negative, but when a body is electrified these two fluids are separated so that one remains in excess of the other. There is always a passage of the electrical fluid in two directions along a conductor, but, when the direction of the current is spoken of, it is the direction of the positive current that is always meant. Statical electricity can also be produced by pressure, as when certain crystals are firmly pressed together; by cleavage, as when two layers of mica are split apart; and by heat as well as by friction. It may also be produced by torsion. It is found that the charge of electricity if collected in a spherical body is on the outside, and not within the body, and if it is not a spherical body the electricity collects chiefly at the part most nearly pointed. This kind of electricity is transferred in three different ways: 1. By conduction from one body to another in contact with it; 2, by convection, where gas or the air in contact with an electrical body takes away some of its electricity; 3, by discharge, where a highly electrified body suddenly loses a portion of its charge.

Machines for producing statical electricity are usually based on the friction method. The old-fashioned machine consisted of a circular glass plate which was rotated between two cushions, and the electricity thus produced was taken off and carried to a metallic cylinder, called the prime conductor, by means of metal points. Silk and glass as insulators prevented the electricity from running off into neighboring objects. More recently machines have been constructed on the principle of induction, as illustrated in the electrophorus. These are known as the Holtz machines.

The condensation of electricity is illustrated in the Leyden jar. This is a sort of bottle, lined up to a short distance from its top, both inside and outside, by tin-foil, and in the stopper is a brass knob which is connected with the tin-foil on the inside of the jar by a chain. When the knob is charged with positive electricity from a machine, it collects on the tin-foil inside the jar, while a corresponding amount of negative electricity collects on the outside of the jar. By this means a large amount of electricity may be collected and held by the jar until discharged by making

connection between the tin-foil on the inside and that on the outside of the jar. The electricity is held, not on the tin-foil, but on the surface of the glass. This is proved by means of a jar that can be taken to pieces after being charged—although the two pieces of metal which lined the inside and outside are now brought in contact, yet when the whole is put together again the charge is found to remain, and it is discharged by connecting the knob with the metal lining of the outside. All that these metal linings accomplish here is to make a large conducting surface over the whole of the glass upon which the electricity collects. The discharge of electricity from such a jar, or a battery of several of them connected, produces a variety of results. The spark will pass through a thin plate of glass or a card and make a hole in them by disrupting them; or, in passing through points of metal, it heats them to a high temperature and vaporizes them, so that we get luminous effects from them. Electricity is estimated to travel at the rate of two hundred and eighty-eight thousand miles in a second.

Franklin first showed that lightning was simply a discharge of electricity from the clouds to the earth, and it occurred to him that, as points condense electricity and draw it away and discharge it quietly, lightning-rods might be made on this principle that would prevent the disruptive effects of a discharge of lightning, and so be a protection to buildings on which they were placed. Such lightning-rods are really a protection when properly made. A perfect one should be large enough to carry the charge of electricity, should have no break in it, should terminate at the top by numerous points, and connect at the bottom with the ground below the water-line, and there be surrounded by fragments of iron buried in moist earth. It is well, also, to have it connect with the metallic water- and gas-pipes running through the house.

Now, a few words in regard to dynamical electricity Galvani discovered, in experimenting on frogs, that when two pieces of metal, like copper and zinc, were placed in contact with the frog's leg and their ends connected, a movement of the leg would take place. This discovery gave rise to considerable discussion and experimentation, and, as a result, Volta developed the Voltaic pile, which at first consisted of alternate layers of zinc, wet paper, and copper, piled one on top of the other in varying numbers. It was found that, when the top layer was connected with the bottom one by means of wires, a current of electricity was set up. It became understood then that the electricity was produced by the chemical action of the water in the paper on the zinc, and so more active solvent fluids came to be used instead of water, and cloth was substituted for the paper. It was found that the zinc was the positive element here and the copper the negative, and it is usual to find in all batteries that the metal acted upon is positive, and the one not acted upon is negative. There is now practically only one metal used for the positive element, and that is zinc, for it is the cheapest and the best.

A galvanic battery is simply a combination by which we produce this chemical action, and zinc is the metal acted upon. The principle of the galvanic battery is this: If we immerse two pieces of metal, like copper and zinc, in a

liquid like sulphuric acid contained in a glass vessel, and then connect the two metals by pieces of wire, a current of electricity is set up, because the liquid is decomposed by the zinc, and the H_2SO_4 is split up into SO_4 and H_2 , and the H_2 is set free while the SO_4 unites with the zinc and forms Zn_2SO_4 . The H_2 set free tends to collect upon the surface of the negative element, and in this way the copper finally becomes "polarized" by the hydrogen. The positive element, the zinc, always drives the positive electricity through the fluid toward the negative element, the copper. The wires which conduct the currents from one element to the other are called electrodes, and the one coming from the zinc is the negative electrode, and the one from the copper is the positive electrode. While zinc is universally used for one element, the second element in the battery may be composed of different kinds of metals, according to convenience. A difficulty in using zinc as the positive element was soon found in the fact that little local currents were set up between it and the impurities contained in it, and this caused an unnecessary waste of the zinc. So it became customary to amalgamate the zinc in order to prevent this local action of the fluid upon it. The next improvement made was to prevent the little bubbles of hydrogen from collecting on the surface of the copper, thus keeping the liquid from coming in contact with it in all parts—that is, to prevent the "polarization" of the copper. For this purpose certain substances came to be used to absorb the hydrogen. The first of these substances was the sulphate of copper as used in the Daniell's battery. This consisted of a copper vessel containing a porous cylinder in which was suspended a rod of zinc. Dilute sulphuric acid was contained in this cylinder, and in the copper vessel outside of the cylinder was placed a solution of the sulphate of copper. In this battery the hydrogen set free decomposes the sulphate of copper, forming with it sulphuric acid, and sets free copper which collects on the copper element. Grove's battery consists of a glass vessel containing a porous cup surrounded on the outside by a coil of amalgamated zinc, and on the inside is suspended a rod of platinum instead of copper. The vessel outside of the porous cup is filled with dilute sulphuric acid, and inside with strong nitric acid. The nitric acid absorbs the hydrogen set free by the sulphuric acid and zinc. In the bichromate battery the bichromate of potash dissolved in sulphuric acid is used to absorb the hydrogen, and chromic acid is formed. So the three substances in use for absorbing the hydrogen in different kinds of batteries are sulphate of copper, nitric acid, and bichromate of potash. Bunsen suggested the use of gas carbon to take the place of the copper, or the negative element, because of its cheapness. So the Bunsen battery consists of a cylinder of carbon immersed in a vessel containing nitric acid, and within this cylinder is a porous cell containing sulphuric acid, in which a rod of zinc is suspended. To avoid using the porous cups, the force of gravity has been brought into play in the construction of the so-called "gravity battery." This consists of a glass vessel with plates of copper at its bottom, and upon this crystals of sulphate of copper are scattered, while over all is poured pure water, in the upper portion of which is suspended a

plate of zinc. A very little sulphuric acid is added to start the battery, and then its action will keep up. Gravity here keeps the two liquids apart—the solution of sulphate of copper at the bottom, and the dilute solution of sulphuric acid at the top. This battery produces a constant current, and will run for a very long time. The Leclanché battery consists of a porous cup containing sal ammoniac in which is suspended a rod of zinc, and this cup is surrounded by the oxide of manganese as a depolarizer, immersed in which is the carbon. This battery is used when a current of electricity is desired for a very short time at once, as in striking burglar-alarms, signal-bells, etc. In the dipping battery a plate of zinc is suspended between two plates of carbon, and, when in use, these are let down into a solution of bichromate of potash dissolved in an excess of sulphuric acid. This fluid is called the electropoion. The galvanic battery is now being replaced for many purposes by dynamo-electric machines.

If a strong current of electricity is sent along a good conductor, it passes very easily; but, if passed along a poor conductor, it makes it hot. This is the principle upon which is based the incandescent electric light. A current sent over a fine thread of carbon heats it to a white heat, and thus produces a brilliant light. The same principle holds in the arc light, where the air acts as the poor conductor. Here two pointed sticks of carbon are placed in contact until a current is started through them, and then they are gradually separated for a short distance, when the resistance offered by the air to the passage of the electricity from one point to the other heats them to incandescence, and small particles of carbon in a state of combustion are broken off and carried through the air, thus causing an arc of light between the carbon points. The incandescent electric light and the arc light form two systems of electric lighting.

A current of electricity passed through certain substances will decompose them, and this process is called electrolysis. If it is desired to plate any object with a metal, that metal should be hung upon the positive pole of a battery, and the object upon the negative pole, and then, when an electrical current is passed through them, the metal on the positive pole will be decomposed, and a layer of it will be deposited over the surface of the object hanging on the negative pole. This process is known as galvanoplasty.

The most convenient method of measuring a current of electricity is by means of a rotating needle, around which the current is passed; and this is called a galvanometer.

The electric telegraph is based upon the production of temporary magnets by passing a current of electricity through a coil of wire surrounding a bar of soft iron. All systems of electro-telegraphing involve a battery, a wire, a piece of soft iron surrounded by a coil of wire, a key or current breaker, and a sounder or indicator. Morse devised an alphabet, the letters of which were made up by various combinations of dots and dashes, which were scratched upon a strip of paper by the indicator. But telegraph operators soon found that they did not need to see these letters on the paper, for the ear quickly became educated to detect

the letters by sound alone; so the paper was discarded, and now they hear, instead of see, the dots and dashes.

It is found that, if by any means you change the strength of the magnetism in a permanent magnet, you will at the same time change the strength of a current of electricity passing through a coil of wire surrounding the magnet, and it is upon this principle that all the modern telephones are constructed. If in front of such a magnet a thin sheet of iron is fastened, and if the plate of iron is then approached a little nearer to the end of the magnet, the magnetic center is brought a little nearer to the extremity of the magnet, and hence the magnetic power at this point is increased; at the same time a similar increase is induced in the current of electricity passing through the coil of wire surrounding the extremity of this magnet; and now, if in the same circuit of wire there is a second similarly arranged apparatus, the increased strength of the current passing through the coil surrounding the second magnet will induce an increase in its magnetic power, and hence the second plate of iron will be attracted closer to the end of the magnet. In the same way a slight withdrawal of the first plate from the end of the first magnet would cause a weakening of the magnetism in the second, and cause its iron plate to spring backward again. So, in speaking in front of the first plate, at every vibration of the air produced by the voice the plate vibrates in harmony, and a precisely identical sort of vibration is produced in the plate of the apparatus at the other end of the wire, and these vibrations can be heard as the sound of a voice. This is all there is to the Bell telephone, and it is the principle on which all telephones are constructed.

Original Communications.

THREE CASES OF EXTENSIVE BLOODY OPERATIONS UPON THE FACE.*

By ALFRED C. POST, M. D., LL. D.,

EMERITUS PROFESSOR OF CLINICAL SURGERY IN THE MEDICAL DEPARTMENT
OF THE UNIVERSITY OF THE CITY OF NEW YORK.

By a curious coincidence, these three patients presented themselves to me within two days, requiring extensive bloody operations upon the face. The first patient was a machinist, thirty years of age, from North Carolina, who, in the month of August, 1882, was seriously burned by falling against a boiler. A large cicatricial mass occupied the lower angle of the mouth and a considerable portion of one side of the lip, extending upon the cheek. The face was very much disfigured. The cicatricial mass was included between four incisions, making a quadrilateral figure, somewhat irregular, leaving a very large gap to be filled up by the transplantation of flaps. The facial artery and a number of its branches were divided, there was a good deal of

* These cases were related briefly at a meeting of the New York Medical and Surgical Society, May 26, 1883.

trouble from hæmorrhage, and the operation was necessarily a prolonged one. Flaps were made by making an incision along the base of the jaw on the side opposite the principal deformity, and another curved one pretty well up on the outer part of the face, dissecting them up deeply. The chasm was thus closed, leaving, of course, a little inequality between the two sides.

The second case was that of a man, about fifty years of age, with epithelioma commencing at the lower lip near the angle of the mouth. It extended out into the cheek. In order to remove it, it was necessary to make an incision through the upper lip at the angle of the mouth, extend it horizontally outward, then downward, then inward to the inner margin of the growth. Extensive dissection of the subjacent parts was made. The operation was a very protracted one, but the immediate result was very satisfactory. The chasm was closed with very little deformity.

The third case was that of a man, about thirty years of age, who had a tumor extending over the entire alveolar process of the left side of the lower jaw, attached by fibrous adhesions, but not firmly fixed. It was of three years' standing, and was believed to be non-malignant. The tumor was exposed by making an incision through the median line of the upper lip, extending it horizontally between the lip and the nose, then vertically between the nose and the cheek, then horizontally between the cheek and the lower eyelid. The extensive flap thus outlined was drawn outward and downward, so as fully to expose the morbid growth, which was then separated without difficulty from the alveolar portion of the jaw, to which it was attached. After the bleeding vessels had been secured, the flap was brought back into its place, and secured by numerous fine sutures. After the wound had been closed, the face was scarcely at all disfigured, as the lines of the incision had followed the natural furrows of the parts which it had involved.

NOTE.—*October 13, 1883.*—I had an opportunity of seeing all the patients after their wounds had healed. No mishap occurred to either of them, and, considering the extent of the incisions which were made, the symmetry of the face was as little disturbed as could reasonably have been expected.

CAN CANCER OF THE PENIS BE ACQUIRED BY INOCULATION FROM CANCER OF THE CERVIX UTERI?

BY PAUL F. MUNDÉ, M.D.,

PROFESSOR OF GYNÆCOLOGY IN THE NEW YORK POLYCLINIC, AND IN DARTMOUTH COLLEGE.

SOME time since there appeared in this journal the report of a clinical lecture by one of our great teachers of gynæcology, in which the statement was made, in answer to a question by one of the students, that there is undoubtedly great danger of cancer being propagated by means of sexual intercourse, and that repeated instances of cancer of the penis being contracted in this way are on record. "The slightest abrasion of the penis," the lecturer continues, "may be sufficient for the absorption of virus from the malignant growth, and the husbands of women suffering from

cancer of the uterus should, therefore, always be warned against intercourse with their wives."

While the *possibility* of cancer being transmitted by direct contact of an abraded surface with the raw malignant growth had seemed plausible to me, and had occurred to me more than once while making examinations of women whose uteri were thus affected, I confess the assertion that cancer of the penis had *actually* been acquired directly from a cancerous cervix surprised me, as I was quite sure that such an instance had never come to my notice, either in print or by hearsay. As I remembered reading that experiments in the inoculation of cancer-juice on dogs had resulted negatively, it seemed to me that, if cancer of the cervix could be thus transmitted, cancer of the penis would be much more common, considering the late stage at which the malignant degeneration of the cervix usually presents itself, and the usual uninterrupted performance of the sexual act for some time, in spite of the hæmorrhage produced by it. And, further, it would be very easy to elicit the fact from the husband that his wife was suffering from or had died of cancer, as soon as he was informed that his penis was afflicted with the same disease.

As my experience, of late years confined to women, failed to give me data bearing on these points, and as I was anxious to clear up, as far as possible, what seemed to me a question of great practical importance, as well as of ætiological and therapeutical interest, I wrote to a number of prominent surgeons and pathologists, at home and abroad, requesting them to answer me the following questions: 1. Do you know of any case in which cancer of the penis has been directly traced to inoculation by contact with cancer of the cervix? 2. Do you believe inoculation of cancer by temporary contact to be possible?

The gentlemen to whom I addressed these letters of inquiry were Professors T. E. Satterthwaite, W. H. Welch, R. F. Weir, and John A. Wyeth, of New York; Vincenz Czerny, of Heidelberg; and Theodor Billroth, of Vienna. All replied with the utmost promptness, and, with their permission, I reproduce the substance of their letters.

Dr. Satterthwaite, under date of September 3, 1883, writes as follows: "In reply to your note I may say that, in a published account of one hundred cases of carcinoma in its various forms (*N. Y. Med. Jour.*, September, 1879), there is not a single instance given in which the disease originated from the contact of sound (i. e., non-carcinomatous) tissue with carcinoma. Still, I am inclined to agree with those pathologists who admit that contact may sometimes cause the disease, and I have in mind the case of a lady that I once took care of (in the practice of Dr. Gurdon Buck) where an epithelioma of the vulva crossed from one side to the other. In this case the growth was very exuberant, and, causing much pressure upon the confronting surface, eroded it. Subsequently, another growth sprang from the eroded spot. This is the only case I have in mind."

Dr. Welch, September 13th, says: "I am sorry that I can not give you any very definite information regarding the subject of your letter. The majority of experimenters have obtained no positive results from their attempts to inoculate cancer in animals, and the few seemingly positive

results which have been obtained are far from convincing. B. v. Langenbeck injected into the femoral vein fresh cancerous material, and a few months afterward he found cancerous nodules in the lungs; but Virchow says that they resemble primary cancer in the dog. The other positive results are not much more satisfactory than this, so that it is generally accepted by pathologists that cancer is not inoculable from man to animals. Virchow says, however, that such negative results do not settle the question whether cancer may not be transmitted by inoculation from man to man, and I remember hearing von Recklinghausen express himself with great caution on this subject in one of his lectures. The literature of the experimental side of the infectious theory of cancer is to be found in D'Outrelepont's article in Virchow's 'Archiv,' vol. xlv. D'Outrelepont's experiments were carefully conducted and entirely negative. Nowinsky ('Centralbl. f. med. Wiss.," 1876) claims to have produced two small growths out of forty-two otherwise unsuccessful inoculations. I do not myself know of any case where cancer of the penis has been shown to be caused by cohabitation with a woman with cancer of the uterus. I think this cause has been assigned, however, in several instances. Demarquay, in his excellent work ('Maladies chirurgicales du pénis,' Paris, 1876), analyzes, with reference to ætiology, one hundred and thirty-four cases of cancer of the penis, and in only one does he find this mode of infection given as a cause. He himself does not believe in this mode of contagion. I have an idea that a careful search through the literature of the subject would bring to light other cases, but probably equally without proof.

"I have been told that von Langenbeck is a believer in this mode of origin of cancer of the penis, and that he has three or four cases which he considers quite convincing; but I am not aware that he has published them. It is possible that reference may be made to them in Wolff's dissertation, which was written, I believe, under Langenbeck's direction, although this relates to the traumatic origin of cancer.

"The question seems to me one worth ventilating, but I doubt whether any positive conclusions are likely to be reached with the data now at hand."

Dr. Weir writes: "In reply to your note of September 3d, I would say that in my own experience I have not encountered any case of cancer of the penis that could be traced to connection with a woman affected with uterine cancer. The question is not a new one, but the judgment of French observers, notably Demarquay, is against the view. Demarquay, in giving the ætiology based on sixty-two cases well observed, cites one case where this cause was supposed to operate. He, however, thinks that, were inoculation possible, cancer of the penis should be more frequent than it is. Another fact is against it, which is this: that surgeons frequently, in operations for cancer as well as for other things, prick or cut their fingers and nothing evil, *quoad* cancer, results. It would delay my answer too long to hunt up authorities on the subject, and I therefore give you my ideas briefly as above.

"I reopen this, as I find I have omitted an answer to one of your questions, as to the general inoculability of cancer. While all my clinical knowledge is against such means of

transmission, yet the latest authors, notably Cripps on 'Cancer of the Rectum,' express a leaning toward the doctrine of its parasitic nature, especially since the heredity of the disease has been so seriously invalidated in late years."

Dr. Wyeth sent the following reply: "I have never heard of a case of cancer by contagion. It is held by some pathologists that it is transmissible by inoculation. In my own experience, or to my knowledge, I have known of no case of epithelioma from coitus. Personally, I doubt the contagiousness of carcinoma. If an individual be of a cancerous cachexia by inheritance, or as a result of irritation (local), the inoculation of cancer cells might precipitate the process. I believe firmly that tumors of all kinds are chiefly caused by irritation, but I am not willing to deny that they may occur without the unnatural disturbance of a part."

Professor Czerny writes, under date of September 19th, as follows: "I am not acquainted with any case where the transmission of cancer virus from one individual to another can be asserted with any certainty, however much the well-known observations of auto-infection of cancer may incite investigations on the subject. So much is certain, that the husbands of the numerous patients whom I have seen with uterine cancer have *never* presented themselves to me with cancer of the penis, although I have repeatedly been asked by them as to the danger of infection.

"Likewise, I have not met with a case of carcinoma of the penis, which, it is true, are not quite so numerous, where a suspicion of cancer of the uterus in the wife could be entertained.

"The adhesiveness of the cancerous virus must certainly be very slight, and a local or individual disposition must be present in order to render such infection possible.

"Neither do I know of any case of cancerous infection of a physician, although septic infection from putrid cancerous ulcers is not so rare.

"The comparatively moderate percentage of cancerous disease in physicians and nurses, also, does not speak for contagion. Still, collective investigations of this subject would be desirable, and I am very eager to hear your conclusions."

Professor Billroth, also, under date of September 17th, writes: "Although I consider it very possible, *under unusually favorable circumstances*, that inoculation of carcinoma by direct contact during coition *might* occur, I am not acquainted with any case which would transform this hypothesis into a fact. Gynecologists ought to have the best opportunities to make such observations."

The evidence of these experts certainly does not confirm the statement that "repeated instances of cancer of the penis being contracted in this way" (by inoculation from cancer of the uterus) "are on record." None have seen or known of such an instance; the reputed cases are questioned by the writers who mention them, and the general belief is that such infection by contact can occur only under the most favorable circumstances, i. e., when such contact is protracted, when a predisposition to cancer exists, either local or constitutional, and when an abraded surface is present. This statement applies equally to cancer in any portion of the body. The comparatively short period of con-

tact between the penis and the female genital organs during coition must seem scarcely sufficient for the implantation of cancer cells on an abraded spot on the penis, however fully such short contact may suffice for venereal or septic infection.

Did such short contact of an abraded living surface with a cancerous ulcer suffice for the inoculation of that disease, surely the gynecologists—whose index-fingers can not always be protected from slight injuries, and who, unknowingly, examine many women with cancer of the cervix, making that very diagnosis by such digital examination—would long ere this have become inoculated with it. But no such instance is recorded.

While thus the *first authenticated, unquestionable* case of inoculation of the penis with cancer cells from a cancerous cervix seems as yet unpublished, and while it is still doubtful whether such inoculation actually takes place, still the *possibility* of such an occurrence can not be denied, and I trust this communication may induce gentlemen who have met with cases in point to place them on record. Certainly the subject is of sufficient interest and importance, clinically and pathologically, to merit further investigation, and, if possible, ultimate positive elucidation.

A CASE OF TUBERCULAR SYPHILIDE OF THE FACE.

BY H. RAPHAEL, M. D.,

ATTENDING PHYSICIAN FOR DISEASES OF THE GENITO-URINARY ORGANS AND
SYPHILIS, BELLEVUE HOSPITAL, OUT-DOOR DEPARTMENT.

A MERCHANT, aged thirty-four, married, a native of the United States, and the father of three healthy children, states that he always enjoyed good health, never had any eruption, but had a sore on his left leg when he was fifteen years old. He solemnly asserts that he never had any illicit intercourse, nor ever exposed himself in any way whereby he could contract specific disease. About eight years before coming under my care he had a sore over his left eyebrow which refused to heal by the use of various remedies, and, upon applying to a physician, he was told that it was lupus. The sore continued to spread, notwithstanding the use of caustics, until it involved the lower half of the forehead to the external angle of the right eye and the temple, destroying almost all the hairs of both eyebrows. The sore finally healed, leaving the skin over which it had traveled very thin, pale, and somewhat wrinkled, resembling very much the goose's skin. Since then he has been troubled more or less with sore throat, mostly during the winter months.

About two years ago, he says, a sore similar in character to the one on his forehead formed on his right cheek, midway between the ala of the nose and the cheek bone, which shortly afterward began to suppurate and to discharge thin pus; soon assumed an angry, red, inflamed appearance, spreading farther and farther until it extended up over the malar bone to the bridge of the nose, to the angle of the eye, and downward to the upper lip and lower part of the cheek to where his whiskers grew. For this he was treated by some physicians for lupus with caustics, by others for cancer with various remedies.

In February, 1882, when he applied to me, the ulceration had spread almost all over the right half of the face and upper lip, extending into the right nostril. The edges of the ulcer had a red, angry look, and were thickened and elevated above the general surface; the ulcer was irregular in form, and the ulcerated surface discharged a slightly thin ichor, and all around it, near the inner edges for three or four lines, the surface was redder than the rest of the ulcer. Here and there there were several small ulcers, not joined to the larger one, having the same general character of the latter, which the patient said had existed for some time without manifesting any tendency to coalesce. His general condition was poor; he was much run down and anæmic, his appetite was poor, and he was much depressed in mind on account of his trouble. He was also suffering from ulceration of the posterior wall of the pharynx, resembling that on his face.

Though there were no other evidences pointing to a specific character of the disease, and although the patient solemnly averred that he had always been chaste and virtuous, yet the general character of the lesion was such that I felt justified in putting him upon the use of specific remedies, mainly the bichloride of mercury and the iodide of potassium. By the first of April his face was completely healed, with the exception of a very small spot, when he exposed himself to a drenching rain, and that brought on an attack of erysipelas of the right half of the face, extending to and involving the upper and lower eyelids, forehead, ear, and scalp, with pain, redness, and swelling of the parts involved. For this he was treated with large doses of muriate of iron, stimulants and tonics internally, and the usual topical applications. In about two weeks he was so far recovered from his erysipelas as to be able to resume the specific treatment for the ulcer of his face, which had again spread considerably.

I lost sight of him in the early part of May, and did not see him again till the 12th of October, when he again presented himself with his face completely ulcerated, the ulcer extending over the entire surface described above, and this had happened, he stated, in a few days only. When he stopped treatment in May previous, he supposed himself to be entirely cured of his disease, for the ulcer, he said, was almost entirely healed. Dr. Bulkley was kind enough to see the patient, and confirmed the opinion as to the specific nature of the disease. The patient was again placed upon the use of bichloride of mercury and iodide of potassium, with iron and a zinc preparation locally, under which treatment the ulcer healed up completely, leaving a somewhat thickened scar, stellate in form, running obliquely from the cheek toward the inner angle of the eye.

March 5, 1883.—Patient again presented himself to-day, with an oblong ulcer of about three quarters of an inch in length and a quarter of an inch in width on the posterior wall of the pharynx, but otherwise in excellent health. Under the use of specific remedies this also healed up rapidly, and he has since remained well.

=====

THE ODOR OF IODOFORM.—According to a writer in the "Gazette hebdomadaire de médecine et de chirurgie," the use of coumarine to mask the odor of iodoform is a failure.

Clinical Reports.

NEW YORK HOSPITAL.

VARICOCELE.—INTERNAL URETHROTOMY: THREE CASES.

Clinical Remarks, September 15, 1883.

By ROBERT F. WEIR, M. D.

VARICOCELE.—GENTLEMEN: There are four patients whom I shall present before you to-day, one suffering from varicocele, and the three others from urethral stricture. Two of the latter present a very similar history, and in each case the operation to be performed is that of internal urethrotomy.

In the case of varicocele, the usual symptoms which are liable to attend this affection have been causing the patient a good deal of suffering, and demand an operation. The symptoms are: pains referred to the rectum and thigh, mental uneasiness, and a change of nutrition in the testicle, which has as yet only led to slight softening, but may finally result in atrophy, etc. I consider the commencement of atrophy a sufficient indication for operative interference, although the other symptoms may not have become troublesome. I will not enter upon the subject of the causation of the atrophy which may take place, nor upon that of the more frequent occurrence of varicocele on the left side than on the right, further than to say that the explanations hitherto offered, based upon the anatomy of the parts connected with the affection, are not altogether satisfactory. Different methods of treatment have been resorted to. When in the hospital, before it was removed to its present situation, in a number of cases I did the operation of puckering up the scrotum, lessening its size by excising a piece of the over-distended tissue. But, although the result was quite favorable for a time, in some instances in which I was able to keep track of the patients, the structure again became distended and called for further treatment. Another method of treatment, but not radical, consists in suspending the scrotum by a bandage, and for this purpose none is better than the army suspensory bandage. Since the introduction of antiseptics, I have more frequently resorted to ligation of the veins on the affected side by passing a ligature through the scrotal tissue in front of and behind them, not including the vas deferens, and tying them, thus setting up a sufficient amount of inflammatory action to cause their contraction. The parts are washed and dressed antiseptically. That is the operation which I propose to do in this case. Springs, composed of some sort of string or wire, and so made as to cut through the tissues in a certain number of days, have been invented to effect a similar purpose.

INTERNAL URETHROTOMY.—The first patient, with stricture of the urethra, gives a history dating back ten years, when he contracted his first gonorrhœa; since then he has had two more attacks. The third time a gleet remained; finally stricture took place, for which, some years ago, internal urethrotomy was performed, and the man was provided with a sound, which he continued to pass for a period, then discontinued it, and recontraction took place. The urine, a few months ago, began to pass in a very small stream, and shortly afterward dribbling occurred at the end of the act, indicating that there was distension of the urethra back of the constriction, in which the urine accumulated, and at the close of urination came away by drops—not having brought to bear upon it the expulsive force of the detrusor urinæ. We are able to pass a filiform bougie through the stricture, which is found to be located in the membranous portion of the urethra, just anterior to the triangular ligament. In this case, as in all cases, we examined the urine carefully, to see that there are no signs of kidney disease; and, with the

more delicate test for albumin than the nitric-acid test which we at present possess in picric acid, we are able to do this with a considerable degree of certainty. This patient is not entirely free from the indications of the nervous element which sometimes leads even to a fatal issue after this operation. On one or two occasions he has had something like a faint after the passage of the sound, but this tendency has been largely diminished by the frequent passage of the instrument.

The history of the second patient corresponds closely with that just given—stricture resulting from a gonorrhœa contracted some years previously. In this case, however, there are two strictures—one situated in the anterior portion of the urethra, and the other at about the same position as in the case of the first patient. They are both of larger caliber than in the first case, but are very unyielding, and for that reason call for division. [In both these cases Maisonneuve's instrument was passed over the whalebone guide, and the stricture was divided up to a point admitting a No. 32 sound.]

The third patient also has a history of gonorrhœa, but the stricture exists only in the anterior portion of the urethra, at a point about three inches and a half from the meatus. The cicatricial tissue can be distinctly felt by the finger at the peno-scrotal junction. Divulsion was performed some years ago, but recontraction took place. By dividing the cicatricial tissue I hope to obtain a more permanent result.

[The further history of the cases will be given in a subsequent report.]

Book Notices.

The Principles and Practice of Surgery, being a Treatise on Surgical Diseases and Injuries. By D. HAYES AGNEW, M. D., LL. D., Professor of Surgery in the Medical Department of the University of Pennsylvania. Profusely illustrated. Vol. III. Philadelphia: J. B. Lippincott & Co., 1883. Pp. 784. [Price, \$7.50.]

THE third and last volume of this great and important surgical work deals with diseases of the larynx, trachea, mouth, and associated parts; with diseases of the eye and ear; with malformations and deformities, and affections of the muscles, tendons, bursæ, and aponeuroses; with surgical affections of the nerves, the lymphatics, the skin, and subcutaneous tissue; with syphilis, tumors, and diseases of the mammary gland; and, finally, special chapters are devoted to the surgical applications of electricity, to the operations of nerve-stretching, and to massage.

It will be seen at once from this enumeration, and from a glance at the two preceding volumes, that the author has attempted nothing less than the enormous task of writing a complete text-book of modern surgery in all its branches—a task which might well make the most industrious worker hesitate, and one which in Holmes's and Ashhurst's works has been portioned out among a number of men, each supposed to be specially fitted for the subject he deals with. But Dr. Agnew is a surgeon of the old school, and the growth of specialties is a recent thing. He would, probably, no more hesitate to do an iridectomy than to write a chapter on diseases of the eye.

It has been generally admitted for some time that the field of surgery is too vast for any one man to compass, either in theory or in practice; but whatever one man can do to refute this idea has been done by Dr. Agnew in the present work. It is the best of its kind of which we have any knowledge. It is better than any other surgery written by any single author, and

better than many of the encyclopædias. It can only be judged fairly by taking special parts, and comparing them with special works on the same subject. The chapter on syphilis must, for example, be placed side by side with the works of Van Buren and Keyes, and of Bumstead and Taylor; that on diseases of women with those of Thomas and Emmet; that on the eye with that of Wells; and that on the throat with Mackenzie's book. But, as the specialist in any of these branches would not go to Dr. Agnew's work for information, in all probability the general practitioner would not go to their works, but would seek the information necessary for general practice in some such book as this. For this we judge the book has been written, and this mission it certainly fulfills.

Any one familiar with modern surgery will be convinced, before looking into this work, that the author could not have collected everything, even in three such volumes as these; but he will probably be surprised to see how much has been collected, and with what excellent judgment the selection has been made; how nearly everything of any real and definite value has been gathered up and incorporated under its proper head. For example, let the specialist in diseases of the throat look over the first one hundred and forty pages of this volume, and see how little which pertains to this subject has been omitted. Not only are the more common affections given, but such things as lupus, lepra, extirpation of the larynx, affections of the nasal septum and the operations for their relief, deformities, tumors, and neuroses. So it is in the next one hundred and ninety-two pages, devoted to diseases of the eye and ear.

The chapter on malformations and deformities is particularly noticeable for the number, value, and originality of the illustrations. Wry-neck is included under this head, and the deformities of the fingers and toes are described and illustrated, as well as those of the ankle and knee. At the very end we find a valuable paragraph on division of the spinal accessory nerve. The chapter on the muscles includes not only wounds, laceration, and rupture, but paresis, myositis, degeneration, parasitic cysts, tumors, thecitis, ganglions, and bursitis, each dealt with concisely, but fully and authoritatively.

Under the Surgical Affections of the Nerves we find twelve pages of tabular matter, comprising the literature of nerve-stretching for the various affections to which it is applicable, such as sciatica (sixty-one cases), traumatic neuralgia (twenty-six cases), neuralgia of the fifth nerve (thirty-five cases), traumatic tetanus (forty-six cases), mimic spasm (eighteen cases), miscellaneous neuralgic affections (thirty cases), central disease (one hundred and six cases), torticollis (thirteen cases), paralysis (forty-four cases), epilepsy (four cases), disease of the optic nerve (eight cases), and contracture and spasm (five cases).

Under the head of Diseases of the Lymphatics we find all that is known of these rare diseases, while the part devoted to the skin and subcutaneous tissue includes only the surgical diseases, such as erysipelas, horns, warts, keloid, elephautiasis, and tumors, with affections of the hair and nails. Under Affections of the Thyroid there is a table of seventy cases of extirpation.

The chapter on Syphilis covers seventy-five pages. The work has been carefully and thoroughly done, and includes Syphilization, Infantile and Hereditary Syphilis, Syphilis and Marriage, and a short note on the Regulation of Prostitution.

In the chapter on Tumors the author acknowledges the assistance of Dr. Formad. It covers just one hundred pages of richly illustrated matter, most of the microscopic drawings being original. The remaining chapters of the work are devoted to the mammary gland; to electricity and electrolysis; to the various operations of nerve-stretching, each of which is illustrated; and the work closes with a practical chapter on Massage,

Well may Dr. Agnew congratulate himself on the termination of his long task. When we remember that the present volume of nearly eight hundred pages is only one of three; that there are nearly 2,200 illustrations, the majority of them original; and that every branch of surgery has been included, the magnitude of the task begins to be apparent. The book represents the study and experience of a lifetime, and we have nothing to say except in praise for the work itself and congratulation for its distinguished author.

A Treatise on Insanity in its Medical Relations. By WILLIAM A. HAMMOND, M. D., Surgeon-General United States Army (Retired List), etc. New York: D. Appleton & Co., 1883. Pp. xiii-9 to 767, inclusive.

Second Notice.

IN his first chapter, on the Nature and Seat of the Mind, Dr. Hammond deals very clearly and fairly with what is often reproached as "materialism," arguing that a misunderstanding has arisen from the mind having been confounded with the soul. With the latter, he remarks, science has nothing to do, while theologians step beyond the proper sphere of their theme when they descend of the former.

Except for its charming style, we find only one more subject for notice in the chapter, and that is Dr. Hammond's pointed statement that the excretion of alkaline phosphates is an exact index of the amount of brain-work that has been performed during the process of their elimination—a view generally held, but one that was sharply questioned, it may be remembered, in a paper read at the recent meeting of the American Neurological Association.

But we must pass over the introductory matter with but few more comments, for, were we to linger as its interest tempts us to linger, this notice would be too protracted. We think the author would have done well to describe the various temperaments in less positive terms than he has chosen, for in fact they are seldom so clear-cut as to answer at all closely to the stereotyped delineations that have come down to us from times when the imagination played a leading part in scientific writing.

While on the subject of the tender age at which insanity sometimes shows itself, Dr. Hammond speaks of an interesting case in which he trephined a maniacal boy six or seven years old, with prompt relief. There was an obscure history of a fall in infancy having injured the head, but no injury was discovered at the time of the operation. The author is inclined to think that moral and emotional disturbances, without marked intellectual aberration, are more common in girls than in boys. In regard to the influence of the sexual functions upon insanity, he says he has never known marriage entered upon for the purpose of curing insanity, but has repeatedly had it suggested to him for his opinion, and has always advised against it. This course certainly seems most appropriate, and the only legitimate one to pursue.

Many a reader of "Tom Jones" has doubtless lingered longer over the digressions than over the thread of the story, and we must confess that Dr. Hammond's digressions are every whit as attractive as Fielding's, and so far-reaching that we find ourselves wondering whether we are not reading a cyclopædia, rather than a medical treatise. We will confess, indeed, that it is to the fondness with which we have dwelt on those portions of the book that did not invite criticism that the length of time which has elapsed between our first notice and this concluding one is to be imputed. But we must at last take leave of our author's bewitching prolegomena, and settle down to his subject proper. And, first, as to his definition of insanity. After quoting and criticising those of many who have preceded him, he

gives the following as his own: "A manifestation of disease of the brain, characterized by a general or partial derangement of one or more faculties of the mind, and in which, while consciousness is not abolished, mental freedom is weakened, perverted, or destroyed." This definition implies that what we call the mind is a product of cerebral action, rather than its ruling power—a conclusion that is unsatisfactory to our estimate of ourselves, albeit one that it is difficult to refute, and one that science is more and more coming to recognize.

After giving the best-known systems of classifying the various forms of insanity, and stating with the utmost candor and appreciation what he considers to be their defects, the author lays down his own classification as follows, premising that he does not regard it as faultless:

I. *Perceptual Insanities* (in which there are derangements of one or more of the perceptions).

- a. Illusions.
- b. Hallucinations.

II. *Intellectual Insanities* (in which the chief manifestations relate to the intellect, being of the nature of false conceptions [delusions], or clearly abnormal conceptions).

- a. Intellectual monomania with exaltation.
- b. Intellectual monomania with depression.
- c. Chronic intellectual mania.
- d. Reasoning mania.
- e. Intellectual subjective morbid impulses.
- f. Intellectual objective morbid impulses.

III. *Emotional Insanities* (in which the mental derangement is exhibited chiefly with regard to the emotions).

- a. Emotional monomania.
- b. Emotional morbid impulses.
- c. Simple melancholia.
- d. Melancholia with delirium.
- e. Melancholia with stupor.
- f. Hypochondriacal mania, or melancholia.
- g. Hysterical mania.
- h. Epidemic insanity.

IV. *Volitional Insanities* (characterized by derangement of the will—abnormal predominance or inertia).

- a. Volitional morbid impulses.
- b. Aboulomania (paralysis of the will).

V. *Compound Insanities* (forms in which two or more categories of mental faculties are markedly involved).

- a. Acute mania.
- b. Periodical insanity.
- c. Hebephrenia.
- d. Circular insanity.
- e. Katatonia.
- f. Primary dementia.
- g. Secondary dementia.
- h. Senile dementia.
- i. General paralysis.

VI. *Constitutional Insanities* (the result of a pre-existing physiological or pathological condition, or of some specific morbid influence affecting the system).

- a. Epileptic insanity.
- b. Puerperal insanity.
- c. Pellagrous insanity.
- d. Choric insanity, etc.

VII. *Arrest of Mental Development.*

- a. Idiocy.
- b. Cretinism.

The subdivisions are not included in the formal list, but are considered in treating of each particular form. It will be seen that this classification is open to the criticism that it is partly clinical and partly ætiological, the former factor predominating.

It must be said, however, that any single basis of classification is scarcely warranted by our present knowledge of the subject. It is questionable, indeed, whether, as in some other branches of medicine, it would not be best for the present to stop at nomenclature and leave classification to the future. Still, a classification is a convenience in a text-book, even if faulty, and, its imperfections being acknowledged by the author, none but the blindest of readers are liable to be misled.

From this point onward, until we come to Chapter IX, the book is almost wholly descriptive, the argumentative portion being so artfully interwoven with what may be called the narrative that it will, no doubt, affect most readers insensibly—almost automatically. In this art the wealth of illustration brought into play is turned to the utmost advantage. The possession of such literary skill is dangerous in a scientific writer, since it enables him to carry the unlearned with him in spite of all opposition. We are bound to confess, however, that Dr. Hammond has not prostituted his power to propagandism. He makes no dogmatic statements that do not seem to him plainly deducible from the facts. At the same time, by avoiding ostensible argument for the most part, he makes sure that what he writes will be read through. It must not be supposed, from what we have said, that Dr. Hammond's personal opinions do not stand out; they do, but not with undisguised prominence. There is, however, no ambiguity about the book. If the limits of our space allowed, it would be interesting to allude specifically to many of the author's views on unsettled points, but we will content ourselves with a bare reference to the confirmation he finds of his idea respecting the connection between reasoning mania and general paralysis in the lesions of the cerebral blood-vessels found in the case of Guiteau.

Dr. Hammond agrees with nearly all writers in regarding the excessive use of alcohol as foremost among the causes of insanity; but he is very positive in denying that insanity due to this cause presents any distinguishing features in its clinical history—an opinion which, he frankly confesses, is the opposite of the one he entertained formerly. He is careful to distinguish between insanity proper and an abnormal appetite for alcohol, opium, chloral, etc. Sunstroke he does not regard as so common a cause of insanity as is popularly supposed, but he allows that it plays a considerable part.

In Chapter X, on the Prognosis of Insanity, there is little to remark, except the vigor with which the author uses Dr. Pliny Earle's demolition of the significance of asylum statistics.

In the next chapter, on the Diagnosis of Insanity, Dr. Hammond expresses himself very sensibly and very forcibly as to the distinction between insanity and irresponsibility. There is much more in the chapter that would well repay analysis, but we must pass it by, as well as the succeeding one on the Pathology and Morbid Anatomy of Insanity.

This brings us to the closing chapter of the book, on the Treatment of Insanity. The most noteworthy feature in the chapter, and the only one we have space to notice, is the answer given to the question, Shall the insane person be treated at home or in an asylum? In reference to this question, Dr. Hammond divides patients into these three groups: 1. *Those who should never be committed against their will* (those affected with perceptual insanity, including illusions and hallucinations; with intellectual subjective morbid impulses; or with aboulomania). 2. *Those of whom a minority may require commitment* (with intellectual objective morbid impulses; with emotional monomania, emotional morbid impulses, simple melancholia, hysterical mania, or epidemic insanity; with volitional morbid impulses; with katatonia, primary dementia, or senile dementia; or with puerperal or choreic insanity). 3. *Those of whom a majority may require to be so committed* (most of those with intellectual mono-

mania with exaltation, with the same monomania with depression, chronic intellectual mania, or reasoning mania; with melancholia with delirium, melancholia with stupor, or hypochondriacal mania; with acute mania, periodical insanity, hebephrenia, circular insanity, or general paralysis; or with epileptic insanity).

In closing our notice of this remarkable book, we feel impelled to set down as foremost among its many merits the fact that it makes plain to the general practitioner a branch of medicine that was to him almost a *terra incognita* before.

The Laws of Life, and their Relation to Diseases of the Skin.

By J. L. MILTON, Senior Surgeon to and Lecturer at St. John's Hospital for Diseases of the Skin. London: Chatto & Windus, 1882. Pp. 154. [Price, 1s.]

THE author of this little book ambitiously aims to apply to biology, both in its normal and in its pathological aspects, the laws of correlation and conservation of force. He has constructed a theory of vital action which he terms "the vital-power theory," by means of which he seeks to explain the most diverse phenomena of life, such as those relating to heredity, peculiarities of the individual, longevity, sleep, disease, and death. The vital power he regards as a single and relatively constant force for each individual, and not as an assemblage of forces, each one endowing its special organ. This vital force is constantly ebbing and flowing in varying currents to different parts of the anatomy. There is an "animal-life current," a "food current," a "brain current," a "reproductive current," and so on. Any excess in one current necessitates a diminished flow—i. e., lessened vitality—in the other currents. Hence, when in any individual we find an excess of development in one portion of the economy, other portions will show a corresponding defect in development. Thus, an individual showing superabundance of "animal life" will be correspondingly lacking in brain force, in reproductive power, etc. Great development of "organic life," as evidenced by longevity, he argues, is rarely associated with the highest intellectual powers or with a numerous progeny. Similar laws govern the excessive development of brain power.

In like manner, applying his theory to pathology, he contends that disease is the result of disturbed equilibrium of the life currents. The exanthemata, for example, are said to be due to the impingement of a noxious substance or miasm upon certain susceptible portions of the body, whereby vital power is deflected from other currents and conveyed to the seat of impact, or to other localities to which the original irritation may have been reflected. The effect of the miasm is compared to the effect of the exposure of the surface of the body to a draught of air resulting in a "cold." In the same way are explained all the diseases commonly known as "zymotic." The theory of zymosis is entirely discarded. Consumption, he holds, does not prove fatal in consequence of a general decay of the vital powers, but through "the subsidence of vital power in every part but the seat of mischief." The amount of vital power concentrated in the lungs is the equivalent of that lost in other parts. A stroke of lightning kills by the suddenness and completeness with which vital power is withdrawn from all parts of the system to the seat of injury, leaving insufficient force in important organs to sustain the functions necessary to life. These illustrations of Milton's argument are, of course, incomplete; but they serve to show its general character. Objections in abundance will suggest themselves to the reader on almost every page, but withal the perusal will be found not uninteresting or unprofitable. The theory, founded as it is upon a well-recognized principle of vital action, has in it a strong element of truth. It is the same princi-

ple that is the basis of the doctrine of substitution in therapeutics. But we think most readers will agree with us that the writer has given this principle an importance in "the laws of life" that is greatly exaggerated.

We are at a loss to understand why such prominence should be given in the title to diseases of the skin. Their relation to the theory is not very apparent, and little is said concerning them that is specially original or noteworthy.

BOOKS AND PAMPHLETS RECEIVED.

Tabulæ Anatomicæ Osteologiæ Editæ a Carolo H. von Klein, Artium Magistro, Medicinarum Doctore. Cincinnati: Cincinnati Lithographic Co., 1883.

Recherches cliniques et thérapeutiques sur l'épilepsie, l'hystérie et l'idiotie: compte rendu du service des épileptiques et des enfants idiots et arriérés de Bicêtre pendant l'année 1881. Par Bourneville, médecin de Bicêtre, Bonnaire (E.) et Wuillaume, internes du service. Paris: Bureaux du "Progrès médical," 1882. Pp. xvi-178.

A Manual of Practical Hygiene. By Edmund A. Parkes, M. D., F. R. S., late Professor of Military Hygiene in the Army Medical School, etc. Edited by F. S. B. François de Chaumont, M. D., F. R. S., etc., Professor of Military Hygiene in the Army Medical School. Sixth Edition, with an Appendix giving the American Practice in Matters relating to Hygiene, prepared by and under the supervision of Frederick N. Owen, Civil and Sanitary Engineer. Vol. I. New York: William Wood & Co., 1883. Pp. xv-368. [Wood's Library of Standard Medical Authors.]

The Transactions of the Medico-Chirurgical Society of Edinburgh. Vol. II. New Series. Session, 1882-'83. Edinburgh: Oliver & Boyd, 1883. Pp. xxiii-128.

The Collective Investigation of Diphtheria, as conducted by the "Therapeutic Gazette," Detroit, Michigan; with Editorial Summary by J. J. Mulheron, M. D. Detroit: George S. Davis, 1883. Pp. 120. [Price: boards, \$1.25; cloth, \$1; paper, 75c.]

Seasickness: its Cause, Nature, and Prevention without Medicine or Change in Diet. A Scientific and Practical Solution of the Problem. By William H. Hudson. Boston: S. E. Cassino & Co., 1883. Pp. 147.

Salary List and Civil Service Law, Rules, and Regulations, with Specimen Examination Questions in the Custom-House, Post-Office, and Classified Departmental Service. Prepared under the Direction of Henry N. Copp, Attorney and Counselor-at-Law. Washington: Henry N. Copp, 1883. Pp. 143.

The Endoscope in Diseases of the Male Urethra. By A. Ravogli, M. D., Cincinnati. [Reprint from the "Cincinnati Lancet and Clinic."]

Prison Labor. Some Considerations in favor of Maintaining the Present System. Pp. 77-24.

Correspondence.

LETTER FROM BOSTON.

The Veterinary Hospital.

Boston, October 20, 1883.

THE Veterinary Hospital is situated at the south end of the city, and is a three-story building of brick, with freestone trimmings. It is the most commodious and best-appointed structure of its kind in America. In the construction, the use to which every part was to be devoted was kept well in mind. The basement is fitted up in part with stalls for cows, while the rest will be occupied as a blacksmith's shop. On the first story there are

the offices for the surgeon. Eleven stalls, one of which is padded, are provided for horses, the rest of the space being devoted to an operating- or examining-room, a large well going from this floor to the roof furnishing the necessary light. The second story has a few stalls for horses, but is largely given over to dogs and other of the smaller animals. The rest of the floor is divided into rooms for the attendants, for the pharmacy, and for the cases where the surgical instruments are kept. The third floor has quarters for the house surgeon and others, and will also be used for storage purposes.

Advantage is to be taken of this hospital for clinical instruction to the students at the veterinary department of Harvard University; and yet the laboratory work is to be done and didactic instruction given in part at the Medical School building in Boston, and in part at the Bussey farm, in West Roxbury, six miles from Boston, where the agricultural department of the university is located.

It seems as if a better arrangement could be made—one by which all the instruction could be given, so far as practicable, under one roof, for much time must necessarily be wasted according to the present plan. The faculty seem to think that the branches of physiology and pathology can be studied to as good advantage at the Medical School with those studying general medicine as if the instruction was given separately. In Europe, generally the students of both human and veterinary medicine have studied the preliminary branches together; but the authorities in Germany, not being satisfied with the results from such a classification, have lately appropriated \$100,000 for the erection and fitting out of two laboratories—one for physiological, the other for pathological work—for those pursuing veterinary science, thus showing in a practical manner that they believe each department should be separate. To show how the Harvard Veterinary School expects to raise funds, let me quote the following from its announcement:

ANNUAL SUBSCRIBERS.—To each subscriber of ten dollars a year (the year beginning June 1st, and payment being made in advance to E. W. Hooper, treasurer, 70 Water Street, Boston), the following privileges will be given in connection with the establishment:

1. Each subscriber may have admitted to the hospital for medical or surgical treatment an unlimited number of animals, his own property, at a charge for keep and medicines only (not exceeding \$1 a day).
2. He may procure without charge the opinion of the surgeons of the school as to the treatment of any animal which he may desire to retain in his own possession, whenever an opinion can be given without examining the animal away from the establishment.
3. He may have ten horses examined as to soundness in the course of the year, and procure the opinion of one of the surgeons thereon, either verbally or in writing, free of charge. Under this contract patients will not be visited, and horses will not be examined for soundness away from the establishment.

The circular from which this was taken was freely distributed about the city to those likely to be interested in the subject, and drew out a spirited letter from Dr. Frank S. Billings, well known, not only to the readers of the journal, to which he has contributed numerous articles, but to all those interested in the progress of veterinary science. The letter spoken of was published in the "Saturday Evening Gazette" of May 5, 1883, and contained the following extract from an article written by Dr. George Fleming, editor of the "Veterinary Journal," and published in that paper:

Our readers will have observed that for some months an agitation has been going on among the members of the veterinary profession, chiefly metropolitan practitioners, with reference to the unfair competition maintained toward them by the Royal Veterinary College, London, known as the subscription system. As is well known, and as so many veterinary surgeons find to their cost, this school advertises that

for two guineas a year it will examine seventy horses for soundness, give advice with regard to an unlimited number, receive into the school hospital and treat sick horses, as well as sell medicines at cost prices, shoe horses for a smaller sum than the ordinary farrier can, etc.; while for five guineas per annum an indefinite number of horses will be examined, and all other privileges guaranteed. In fact, it offers to do what no practitioner can afford to do, and undersells its own students to such an extent that it is not only impossible for them to compete with the cheap establishment, but the bread is actually taken from their mouths by this so-called alma mater of theirs. It has been said that the French revolutions eat up their own children. The London school does this and more—for it charges them heavy fees for tuition, then starves and swallows them.

Had the school never been begun on this system, there can be no doubt that later it must have been established by the country for the benefit of the country. In this case, veterinary medicine would have all along stood in a very different position to what it has done and does now, and millions of pounds would probably have been earned. A desire to get hold of money has been the bane of the school, as it has been its chief aim; hence the degrading subscription system, and the determination to continue and extend it, no matter who suffers, whether it deprives the veterinarian or the blacksmith of his means of livelihood.

Surely the noblemen and gentlemen who lend their names and patronage to this school are not aware of the fact that it is not a scientific institution, nor yet a college, but merely and mainly a great co-operative horse-doctoring and horse-shoeing concern, devised to benefit wealthy subscribers, having nothing to do with the introduction of humane or improved methods of treating disease or accident, and doing its business on shamefully cheap principles.

We may be told that the subscription plan is necessary to the existence of the establishment, and that, without it, it must perish of inanition. If such a statement is correct—and we do not deny it—then it reveals a very discreditable state of affairs. No other veterinary school in these islands requires to resort to such ignoble stratagem to live; no medical school does, or dares to, undersell practicing physicians; in fact, the London Veterinary College is the only medical or veterinary school in Europe which, like a huge parasite, lives and grows at the cost of its graduates, past and present. The "subscription system" has been the curse of our science, and its malignant influence can be traced through long years and in many directions. It is unprofessional in every sense of the term; it is derogatory and damaging to veterinary medicine, and in every way disadvantageous to the student and a discredit to the governors (of the school) and the country.

Though the foregoing remarks were written concerning the London Royal Veterinary College, they are as applicable to Harvard, and it seems as if, with the amount of money at the disposal of the University, and the readiness with which it can obtain funds when it makes a public demand, some other plan than the one adopted might have been tried. If the same policy should be attempted in the medical department there would be a great hue and cry, and physicians would unite to deprecate the attempt. Yet what is right in one case should be right in the other, and it is most earnestly to be desired that a change in the manner of raising funds should be made. The excuse can not be given that these means are necessary to obtain the material for clinical instruction, for by the free system, on the same principle as in hospital out-patient departments, the want would be supplied.

LETTER FROM CINCINNATI.

Medical Legislation in Ohio.—Medical Ethics.—The Medical Colleges.

CINCINNATI, October 15, 1883.

THE recent State election has given us a Democratic Legislature. This fact is worthy of mention in a letter such as this only

in consequence of its possible relation to future medical legislation in Ohio. If the Democratic party is consistent in following a policy directly opposite that of the Republican party in matters medical as well as political, the present revolution in our State government promises well for the friends of medical and sanitary reform. This remark calls, perhaps, for more explicit statement regarding the condition of State medicine in Ohio, and the relative responsibility of the two parties for our shameful conservatism.

Ohio has no State board of health, nor has it a law worthy the name regulating the practice of medicine. As a result, the State is in a deplorable condition, being the camping-ground, if not the permanent abiding-place, of the quacks driven by wholesome legislation from other States. Illinois has become famous for her salutary medical laws and their vigorous enforcement. Indiana has taken a wise step in the same direction; so, indeed, have Michigan and West Virginia, while Kentucky is not so conservative as her Bourbonism would imply. Thus the unqualified practitioners, the blatant quacks, the itinerant "tapeworm artists," and the traveling "cancer doctors," are driven from every side into Ohio, where the only statute that confronts them is one declaring that they can not collect their fees at law unless they are qualified practitioners—that is, either graduates in medicine or practitioners of ten years' standing! Is this not marvelous for a State so progressive as Ohio is presumed to be? and ought it not to bring the blush of shame to those who are responsible for the condition?

An effort was made in the last Legislature to secure a law meeting these unfortunate conditions. A bill was prepared and introduced into the House corresponding in every important particular with the law that has proved of such value in Illinois. It stipulated, however, that the Governor, who was to make the appointments for this board, was to select representatives of each of the recognized so-called "schools of medicine." These schools were not specified as "regular," "eclectic," "homœopathic," "physio-medical," "vitapathic," "electro-pathic," and so on, leaving it with the Governor to determine what was meant by "recognized schools of medicine." This particular clause was unsatisfactory to the medical hoodlums, who at once became distrustful of the appointing power; each individual Arab became apprehensive that his particular sect would not be recognized; the common quacks were opposed to reform on general principles. As a result, the irregulars of all kinds and degrees followed Dennis Kearney's advice, and, in the language of that famous reformer, "pooled their issues." They made a concerted attack upon the Legislature, and that magnificent hippodrome of ignorance, conceit, demagoguery, and venality capitulated without parley. The bill was put to a final vote, and the feeble support it received was buried beneath an avalanche of negatives. That Legislature was Republican, and the record it made in this matter should put the grand old party of reform to the blush. An effort will be made again this year to secure the passage of this much-needed law, but with what result remains for the newly triumphant Democracy to determine.

You in New York do not hear much concerning ethics in Ohio or the West, and I presume you are thankful, as you have quite enough of that subject at home. We are not indifferent to the issue that is being joined in the Empire State, nor are we indifferent to what is of more importance—namely, the general subject of ethics. The Ohio State Medical Society has given no formal expression on this matter. Nor have our local societies, so far as is generally known, taken action concerning the modification of the national code. The question of change is not, therefore, at present an issue, but I predict that the time is not far off when the conflict will come. The prominence of your New York fight has made the topic one of general conversation,

and, as a consequence, physicians are thinking, their views are widening, and presently their conclusions will crystallize in action.

After viewing the field carefully, my judgment being based upon an intimate acquaintance with physicians living all over the State but chiefly in the southwestern section, I am led to the conclusion that the adherents of the two sentiments are capable of quite definite classification. Those in favor of the old code—the conservatives—are made up of several elements, viz.: those who are constitutionally opposed to any change in principle (chiefly very old doctors); those who would like to change but will not do so to avoid an appearance of stultification (also old doctors); those who believe in the ostracism of any man who does not think as they do (implacables of all ages); those who think as their fathers thought for no other reason than that their fathers did think so (generally young men of tardy adolescence)—these, with a few subdivisions, comprise the class of conservatives. Those in favor of a change—the reformers—are also made up of several classes, viz.: those who believe in the largest possible personal liberty compatible with the general good (representatives of all ages); those who believe that the old code has fostered schism and kept the profession at the farthest remove from unity (generally observant old physicians with moral courage enough to acknowledge their convictions); those who are convinced that under the advanced teaching in "irregular" schools the education imparted is not widely different from that given at the orthodox institutions (generally the younger element of the profession who have had the temerity to examine into the question); and, finally, those who have come into the profession since the code was framed and since the rancorous animosity prompting it has died out, and who, having had no voice in framing its provisions, refuse to accept it as the exponent of their ethical faith (progressive young men in and out of the medical societies, the latter of whom are anxious for an opportunity to vote on this question). This classification, which might be amplified, represents opinions which are to be found among the reformers; and around these opinions conviction is rapidly crystallizing. The conflict is inevitable, and its outcome can not be doubted; the car of progress rolls ever onward.

The medical season is now thoroughly opened in Cincinnati. The schools are in good working order, their professors hard at work, and their students attentive and studious. Some changes have been made in the faculties. At the Cincinnati College of Medicine and Surgery, Dr. J. H. Hazard has been made Professor of Physiology, and Dr. W. K. Boylan has been elected to the chair of *Materia Medica*. These are both young men of some years' standing in the profession, and bring matured judgment along with zeal and enthusiasm in the discharge of their duties. Professor George B. Orr, of the chair of surgery, has just returned from New York and other eastern points, where he has been spending his time at the hospitals, when not engaged in catching blue-fish at Block Island. At the Medical College of Ohio no changes of importance have taken place, but it is generally understood that Professor Dawson, the veteran surgeon, will soon retire, to give place to his more active colleague, Professor Ransohoff, now holding a chair of minor importance in the faculty. The attendance at the various schools is not as large as last year, and has not fulfilled the expectations entertained by the different faculties. The Medical College of Ohio has, as usual, the largest class, but the Cincinnati College of Medicine and Surgery is the only one that already exceeds its matriculation list of last year. The falling off in aggregate patronage is, however, to be construed as a favorable symptom. The making of doctors has already been in excess of the demand, and it is time the mills run at slower speed and with smaller grists.

THE
NEW YORK MEDICAL JOURNAL,
A Weekly Review of Medicine.

Published by
D. APPLETON & Co.

Edited by
FRANK P. FOSTER, M. D.

NEW YORK, SATURDAY, OCT. 27, 1883.

THE ELECTION AT THE COUNTY SOCIETY.

Nothing could be more complete than the victory won by the opponents of the code of ethics of the American Medical Association last Monday night, on the occasion of the annual election of officers of the Medical Society of the County of New York. By majorities ranging, in round numbers, from one hundred and fifty to one hundred and seventy-five, in a total poll of five hundred and ninety-nine, every man on the ticket was elected. The result appears particularly striking when we reflect that the defeated ticket was headed by a man of such renown in the profession, and of such rare personal magnetism, as Professor Thomas. When we chronicled his nomination, some weeks ago, we expressed our view that his election, on the strength of his personal popularity, was not at all unlikely, and we warned our readers not to interpret such an event in any other way than as a tribute to the man—not to look upon it as necessarily any sign of a revulsion of the prevailing feeling on the code question. This caution has proved unnecessary. The men who in the past had signified their devotion to the cause of the Medical Society of the State of New York, as against the misrepresentation, slander, abuse, and petty persecution heaped upon the New York profession in its corporate capacity by sister organizations, by editorial writers, and by individual busy-bodies—the men who have resisted these influences in the past have not on this occasion suffered themselves to be lured from their course by personal considerations. As Dr. Flint, Jr., remarked when he announced the old-code party's nominations, it has been a question of measures, not of men. The victory allows of no misconstruction. So far as ordinary foresight is of any value, it foreshadows the certain defeat of any attempt in February to reverse the stand taken by the State society.

It can not be said that the triumph of the opponents of the old code was in any degree accidental, that it was favored by side-issues, or that it was gained by tactics. The meeting was thoroughly advertised; the purpose of the struggle was perfectly understood by every member of the society; the assemblage was one of the largest that have ever taken place in the whole history of the society, if it was not the very largest. The number of ballots actually cast lacked but one of a round six hundred, and many men are known to have "paired off." There were no questions of detail—it was a plain and square issue, for or against the old code; and both sets of candidates were men whom any medical society in the world would be proud to have for its officers. There was no scope for parliamentary fencing—no voter was in the slightest degree befogged, nor was any attempt made in that direction. It is true that a

charge of bribery was hinted at, but not with even enough show of justification to engage the serious attention of either side. Granting, even, that Dr. Oberndorfer's statements were warranted by facts to the fullest extent, no charge of bribery could lie unless the bribery were attempted on a voter, and Dr. Oberndorfer only maintained that an inducement had been held out to a person to join the society, and that the person in question declined.

One fact should be noted here, since at first sight it may seem singular. We refer to the undoubted circumstance that a large number of men who had signed the old-code declaration voted against the old-code ticket. This, it seems to us, must be explained either by the fact that the terms of that declaration did not commit its signers to the extent that has been taken for granted, or by assuming that many of those signers were disgusted at the failure to remember the implied promise contained in it on the occasion of the meeting of the American Medical Association in Cleveland. The action of the Academy of Medicine, last week, in rescinding the resolutions passed last spring may have strengthened some who were disposed to waver—for there are always a few who will vote with the party that seems to have the best chance of winning—but we are inclined to think that its influence was practicably inconsiderable.

It seems a fair inference, then, and one that is no less a matter for congratulation than the central fact itself, that, in spite of the petty scheming and the resort to parliamentary devices of which so much has been said, the division of the profession on this question of codes is, as it now stands, one of honest difference of opinion. The sooner that fact is recognized, the sooner we shall be out of the undignified position we have occupied before the public for the past year or more. Another satisfactory feature of the matter is daily becoming more and more obvious: the fact, namely, that, as we have all along insisted, and as Dr. Barker gracefully suggested in the impressive remarks with which he accepted the defeat of his proposed amendments to the constitution and by-laws of the Academy, the difference of opinion that exists among us is not as to the principles of ethics, but as to the wholly secondary matter of codes. Each party reckons among its adherents, in about equal proportions, men who have achieved honor for American medicine and an honorable fame for themselves; and each side is burdened, also in about equal proportions, with hangers-on of whom any party would be ashamed.

While we think that the result of this election goes to strengthen principles that must in the long run prevail everywhere, we do not imagine that it will at once snuff out the contention that has arisen. "Harmony" is not generally secured by a victory at the polls, however decisive, but the signal failure of improper devices to prevent that victory is apt to clear the moral atmosphere; and so, in this instance, we trust that henceforth the controversy will be one in which argument shall take the place of strategy, and one in which men will admit that those who differ with them in this matter are actuated by motives as honorable as their own. We see nothing to deprecate in a continuance of the controversy, but we do see

everything to be gained by conducting it in a manner becoming a profession that calls itself liberal.

THE IMPORTANCE OF THE CODE CONTROVERSY.

THERE has been a disposition in some quarters during the past year or more to frown upon all mention of the code controversy. It has been spoken of as a bore, and certain persons have been fond of saying that they were "tired of it." All such expressions must either be the shallowest of affectation, or else they must betoken an inconceivable failure to grasp the situation. We can understand that men whose energies are fully engaged with the problems that every day's life thrusts upon them should feel annoyed at petty outbreaks in a contention of this sort, at spurts that savor of strategy rather than of argument, at filibustering, and at the thrusting of side-issues before meetings called for scientific work. In all conscience, we have had enough of those exploits.

But those matters are not what we now have in mind; we refer to the main question. To assume that it is unworthy of full and serious consideration is to say that a great number of the ablest and noblest members of the profession have been giving their minds to trifles. When we see the American Medical Association resorting to questionable practices in order to protect itself against the possibility of an attempt to modify its code, we can scarcely allow that the movement against which such extraordinary defensive measures are taken is the mere whim of an inconsiderable faction. When the scientific work that, in the natural order of things, would have been done at two stated meetings of so conservative a body as the New York Academy of Medicine gives way to a discussion that practically turns upon the merits of the code question, those meetings, protracted as they were, being sat out by men who, on account of age or infirmity, are seldom seen away from their own firesides after nightfall, we can hardly infer that business of no consequence is in hand. When more than six hundred of the busy physicians of this city spend four mortal hours at a stretch in the work of choosing officers for the county society, simply because the interest turns upon the candidates' affiliations with regard to this question of codes, it does seem as if they, at least, looked upon the matter as of some importance. When we find the American Surgical Association, a young and ambitious organization aiming to achieve some approach to realizing its pretensions, deliberately cut down its membership by practically ousting one of the foremost surgeons of the country—a gentleman of ripe years and of a spotless life—merely for the reason that he will not renounce his approval of the movement against the old code, we can not but suspect that the association views the movement as one it must notice.

For a man of convictions on such a question the world has respect and even admiration, no matter if he is indiscreet, pragmatical, and intolerant. It will even wink at still more unpleasant accompaniments. But for a man who is so stupid as not to recognize what is going on about him the world has no charity. Let us hear no more, then, of this

inanity. Nothing but good can be the eventual outcome of the most thorough examination of the question in all its bearings, and he who affects to be bored with its serious discussion has no place in the nineteenth century.

THE ACADEMY OF MEDICINE.

THE Academy is most heartily to be congratulated on the result of the recent strife over its attitude toward the two parties to the ethical controversy. It was not to be expected that a three-fourths majority would vote in favor of so radical a move as the adoption of the propositions made by the President to amend the constitution and by-laws to the extent recorded in our issue of the 6th inst. It augurs well for the future peace and usefulness of the Academy that several of the prominent members of the party that opposed the amendments applauded the graceful and conciliatory remarks with which the President bowed to the decision of the meeting of October 18th. The decisive vote by which the motion to rescind the resolutions passed last spring was thereupon carried, without debate and without the vote being questioned, was an evidence of moderation on the part of those present. But the most gratifying feature observable on the occasion was the good-natured tone that pervaded the meeting. On the adjournment, it was obvious that both parties were inclined to look upon the bright side of each other's past actions, and to unite their efforts to continue the good work which the Academy has carried on for so many years.

Unless we interpret the temper of the Academy erroneously, there will now be no opposition to the admission of any proper person to fellowship, and the institution is saved from the peril that lately surrounded it. It is to be hoped that, in the annual election, to be held in January, the nominations will be made and the candidates voted for without any reference to the code controversy. We are encouraged in this hope by the absence of any apparent advantage that either party to that controversy could gain from carrying an election in the Academy.

MINOR PARAGRAPHS.

THE NEW YORK INFANT ASYLUM.

THE contention is still going on as to the degree of mismanagement that has been shown in the Country Branch at Mt. Vernon, and as to who is responsible for the same. It is evident that there are serious disagreements still among the managers and the medical officers, and it is quite as obvious that such a state of things can not long continue without practically ruining the institution.

THE COLLEGES AND THE LICENSING POWER.

THE Medical Society of the County of Westchester has lately taken the decided step of preparing a memorial addressed to the Legislature, praying that body to take away from the medical colleges the power to grant licences to practice, and practically to give that power to the Board of Regents of the University of the State of New York. Such action, of course, would reduce the colleges to mere teaching bodies. This would likewise be the result in case the bill drawn up by the Erie County society should become a law. From the fact that the Westchester so-

ciety has addressed a communication on the subject to our own county society, it may be inferred that concerted action on the part of the various county societies is to be attempted.

THE SUPPRESSION OF QUACKERY.

At the annual meeting of the Medical Society of the County of New York, held last Monday evening, an interesting and exceedingly satisfactory report was read, showing the work that had been done by the society during the year in bringing illegal practitioners before the courts and procuring their conviction for violating the law governing medical practice. It was evident that the proper officers of the society had performed their unwelcome task thoroughly, and that their legal adviser had co-operated with them most zealously and intelligently. It was stated, too, that, with very few exceptions, the judges before whom actions had been brought had taken pains to carry out the manifest intent of the law. This function of the society is not only troublesome, in that it involves considerable sacrifices on the part of individuals in the way of attendance at court, but also expensive. It is a pleasure to record that no hesitation was felt by the meeting to appropriate the sum of \$3,500 for the purpose of carrying on the work for the succeeding year.

NEWS ITEMS.

INFECTIOUS DISEASES IN NEW YORK.—We are indebted to the Sanitary Bureau of the Health Department for the following statement of cases and deaths reported during the two weeks ending October 23, 1883:

DISEASES.	Week ending Oct. 16.		Week ending Oct. 23.	
	Cases.	Deaths.	Cases.	Deaths.
Typhoid fever.....	59	19	59	20
Scarlet fever.....	40	5	45	12
Cerebro-spinal meningitis....	4	3	1	1
Measles.....	17	4	13	2
Diphtheria.....	37	13	38	20

SIR WILLIAM MACCORMAC.—On Tuesday evening Dr. Frederick S. Dennis gave a dinner at the Gramercy in honor of Sir William MacCormac and Mr. Matthew Arnold. The next day Sir William MacCormac lectured before the class at the Bellevue Hospital Medical College. On Thursday evening a reception in his honor was given by Dr. Sims and Dr. Harry Marion-Sims.

THE CHOLERA IN EGYPT.—A fresh outbreak is reported from one of the suburbs of Alexandria, a village that had previously escaped the infection. This outbreak is attributed to a canal running through the village having become contaminated from a neighboring cemetery, in which persons dead of the disease had been buried.

CREMATION is reported to have been made compulsory in Lisbon in times of epidemics, and every five years all bodies that have been buried are to be incinerated.

THE FREE HOSPITAL FOR WOMEN, BOSTON, is reported to have received a gift of \$35,000 from Mrs. Oliver Ames.

DR. JOSEPH C. HUTCHISON, OF BROOKLYN.—The many friends of this gentleman, whose severe injury by being thrown from a carriage some weeks ago was recorded in our columns, will be glad to learn that last week he was able to walk about his grounds.

THE EPIDEMIC AT BREWTON, ALA.—Several additional cases have been reported since our last issue, and the disease is now announced to be yellow fever.

TRICHINIASIS is said to be raging with extreme severity in some parts of Germany. At Ermsleben some of the inhabitants of nearly two thirds of the houses are stated to have been attacked. Up to the 21st inst., twenty-three deaths had resulted.

PRECAUTIONS AGAINST LEPROSY IN SAN FRANCISCO.—The "Sanitary News" states that the quarantine officer at San Francisco is quarantining every vessel arriving in port having a leper on board. The vessel is released only upon the captain's giving a bond undertaking to return such leper.

THE KENTUCKY STATE BOARD OF HEALTH.—We learn from the "Sanitary News" that Dr. J. N. McCormack, of Bowling Green, has been appointed secretary to the board.

THE BALTIMORE ACADEMY OF MEDICINE.—We learn from the "Maryland Medical Journal" that at the annual meeting, held October 16th, the following-named gentlemen were elected officers: Dr. F. T. Miles, president; Dr. S. C. Chew, vice-president; Dr. B. B. Browne, secretary; Dr. E. F. Cordell, reporting secretary; Dr. G. Lane Taneyhill, treasurer; and Dr. W. C. Van Bibber, Dr. J. A. Stuart, and Dr. I. E. Atkinson, the executive committee.

OBITUARY NOTES.

J. LAWRENCE SMITH, M. D., OF LOUISVILLE.—The "Louisville Medical News" publishes an obituary notice of Dr. Smith, who died on the 12th inst., in his sixty-fifth year, from which we learn that he was for many years the professor of chemistry in the Medical Department of the University of Louisville, and that he was one of the few foreigners who have been admitted to membership in the French Academy. The "News" speaks warmly of Dr. Smith's personal qualities.

Letters to the Editor.

THE NEW YORK INFANT ASYLUM.

NEW YORK, October 23, 1883.

To the Editor of the New York Medical Journal:

SIR: We desire to make public through the columns of the journal the following additional facts in regard to the management of the New York Infant Asylum, which have transpired since the publication of our letter in the issue of your journal for March 17, 1883.

After the annual meeting of the board in January last, Mr. Clark Bell appointed Dr. E. F. Brush attending physician to the Mt. Vernon Home for the year.

No meeting of the Board of Managers was held between May 15th and September 15th, and no meeting of the Executive Committee of the board was held between the end of June and September 29th. In July last, the president, Mr. Clark Bell, acting under the authority of the board conferred upon him at the annual meeting in regard to medical matters, removed Dr. Brush from his position as physician in charge of the Country Home. During Dr. Brush's term of service he discharged the duties of his office satisfactorily, and he had the respect and confidence of the board. The president, in his annual address in January last, says: "The death-rate for children at Mt. Vernon is $5\frac{3}{13}$ per cent. [*sic*], and, while this is a slight increase on past years,* is really phenomenal as compared with other institutions. . .

* The president overlooks, unintentionally, doubtless, the fact that the death-rate at Mt. Vernon in 1881 was thirteen per cent. *Vide* "Annual Report" for 1881.

The Medical Report and the Report of the resident physician (Dr. Brush) at Mt. Vernon show a very gratifying exhibit as to the health of our inmates."

The annual report of the Medical Committee of the Board, Dr. Joel Foster chairman, says: "Dr. Brush has labored at Mt. Vernon with an intelligence and assiduity which are worthy of all praise. The material in some of his monthly reports is a valuable addition to our present knowledge concerning the rearing of infants." The chairman of the ladies' committee for the Mt. Vernon Home in her annual report says: "The Medical Report will show that the deaths have been few. To the sound, sensible treatment of cases, and shrewd sanitary suggestions of Dr. Brush, is greatly owing this higher rate of health and vigor." Dr. Brush's removal was made against the remonstrance of four medical members of the Board of Managers. His place was filled by the appointment of Dr. Caroline G. Marr, as resident physician.

Since early in August an epidemic of measles has prevailed at the asylum—seventy-five children have died—measles, whooping-cough, dysentery, capillary bronchitis, croup, cholera infantum, gastritis, meningitis, pneumonia, and diarrhœa being variously assigned as the causes of death.

Between September 18th and 28th fourteen deaths took place. Upon September 29th, at a meeting of the Executive Committee of the board (called at the request of a medical member of the board), this communication was presented:

NEW YORK, September 29, 1883.

To the Board of Managers of the New York Infant Asylum:

GENTLEMEN: We all alike deplore the calamity which has befallen our Country Home at Mt. Vernon.

The epidemic which began during the month of August has already destroyed fifty lives, and during the past ten days fourteen deaths have occurred, which shows that the violence of the disease has not abated.

Evidently the means hitherto used are inadequate to control the disease.

In this emergency we offer our united services to the Asylum, requesting that full control of the medical and sanitary interests of the Country Home be delegated to us until the epidemic is ended.

Signed by Drs. FOSTER, BLAKEMAN, BURRALL, GOODRIDGE, and NICOLL.

Three of the medical members of the board were then unanimously appointed a committee, which was "requested and authorized to proceed to the Mt. Vernon Home of the New York Infant Asylum, and institute such measures as they deem expedient to control and subdue the epidemic now raging there; and that they be authorized further to employ such medical assistance as may be necessary to co-operate with the physician in charge of the said Home."

Mr. Clark Bell was not present at this meeting.

Acting under this authority, the committee visited the Mt. Vernon Home and examined carefully into the condition of the institution. The result of their examination convinced them that the resident physician was incompetent for the emergency. They found that the prompt action necessary to control the epidemic could be secured better by intrusting the medical care of the Home to one head than by any co-operation. In fact, co-operation was impracticable. They therefore reported to the chairman of the Executive Committee that their authority was insufficient for the occasion. The chairman thereupon directed them to take all action they might deem necessary, and stated that they must be sustained therein. The committee then returned to the Home. The resident physician was not at the Home. And, in order to spare her feelings, it was suggested that she might have a temporary leave of absence. They placed Dr. Brush (whose former record in the Asylum entitled him to confidence) in temporary charge, and he entered at once upon

the duties of the position. When the resident physician returned (two days later) she refused to recognize the power of this committee, although shown the following letter from the chairman of the Executive Committee:

NEW YORK, October 4, 1883.

Dr. Marr, Mt. Vernon Home:

As Dr. Brush is now in charge of the medical duties in the institution by the direction of the sub-committee of the Executive Committee, to prevent unpleasant and antagonistic feelings, I would kindly suggest that you allow him (Brush) to remain so until after the meeting of the Executive Committee.

Very truly yours,

(Signed by the Chairman).

While this committee was at the Home, the president of the board directed the resident, by telephone, to retain her place. The medical committee appointed by the Executive Committee then withdrew. This took place upon October 4th.

At a meeting of the Executive Committee held upon October 6th, the action taken at the meeting of September 29th, in reference to this Medical Committee, was rescinded without its chairman (who was present) being allowed to report. At this meeting Mr. Clark Bell was present.

On October 6th the coroner held an inquest upon the body of an infant who had died at the Home. From the verdict of the coroner's jury, which was rendered on October 13th, we quote the following:

It appears that in two months thirty per cent. of the children in the asylum have died. This fearful rate of mortality, in our opinion, is the result of gross negligence upon the part of those having charge of the medical and sanitary department of the institution, and a lack of attention of the president of the society, acting under the authority of the Board of Management, in appointing and retaining a person incompetent of performing the duty required of a physician in charge of such an institution. We request that the attention of the proper authorities be invited to the matters referred to, and that immediate steps be taken for the suppression of the epidemic now, and for some time past, existing at the institution, and that all legitimate means be had in respect to insuring not only the lives and health of the inmates, but also the lives of those residing in the neighboring districts. Further, we request the coroner to call the attention of the district attorney of this county to this investigation, and ask him to inquire whether the extraordinary rate of mortality above referred to is not a proper subject for criminal investigation by the Grand Jury.

The resident physician still retains her position.

It seems proper to refer to the statement which has been made in the daily papers, that the trouble in the Board of Management arose from the opposition by the medical members of the board to the employment of women physicians. Newspaper statements concerning medical matters are often incorrect, yet the newspaper is the history of the times. In the present instance we notice these assertions to deny them. We do not recognize sex, but competency, in both medicine and law. We will only say that a majority of the committee was not unfavorable to woman medical management in the Asylum. As to woman's aid in the management of our institution, it has often been found of the greatest service. We would state, however, that, in consequence of the course taken at the meeting in January, the Asylum lost the services of the most efficient member of the Committee on Adoptions—a lady who labored unceasingly to place the unfortunate children of the Asylum in comfortable homes, and it is not too much to believe that some of the children who were swept away by the epidemic would, but for the loss of her valuable assistance, be now in good homes. The Adoption Committee has sustained a severe loss, and one useful branch of asylum work has thereby been seriously crippled.

We close this paper not from lack of further material, but

we believe the foregoing sufficiently explains certain events which have recently transpired in the New York Infant Asylum.

JOEL FOSTER, M. D.,
W. N. BLAKEMAN, M. D.,
FRED. A. BURRALL, M. D.,
E. A. GOODRIDGE, M. D.,
HENRY D. NICOLL, M. D.

13 EAST THIRTY-FOURTH STREET, October 22d.

To the Editor of the New York Medical Journal:

SIR: Will you please state that I am not a member of the Medical Board of the New York Infant Asylum, and that I have never had any official connection with the institution.

Respectfully, your obedient servant,

W. M. POLK.

THE NEW YORK ACADEMY OF MEDICINE.

To the Editor of the New York Medical Journal:

SIR: The reasons why I declined to vote on the resolutions offered by Dr. Flint, Jr., last spring, when the yeas and nays were called, are to be found in the following communication, made by me to the Academy at its meeting held October 18, 1883:

MR. PRESIDENT AND FELLOWS OF THE NEW YORK ACADEMY OF MEDICINE: Important as the business before the Academy is, the undersigned believes that, in view of the serious misrepresentations made as to his position regarding the voting on Dr. Flint, Jr.'s, resolutions, April 19, 1883,* he will be permitted, as a matter of privilege, to make a brief explanation.

When called upon to vote on said resolution, he declined to do so, and was subsequently reproached both within and without these halls for duplicity, timidity, and similar unpleasant qualities. He desires to state that his declining to vote was from an entirely different motive than any which could be based on the contents of said resolutions. He believed and stated at the time, and still believes, that *said resolutions were out of order*, or at least inconsistent with those passed about a year previous and which were offered by Dr. Austin Flint, Sr.

* *Resolved*, That the Academy hereby disavows any sympathy with the action of the State Medical Society, which has put the profession of the State, through its State and County societies, in an attitude of opposition to the medical profession of the rest of the United States.

Whereas, The New York Academy of Medicine has adopted in its by-laws, as its standard of medical ethics, the code of ethics of the American Medical Association, and

Whereas, Each newly-elected Fellow of the Academy is required to sign its constitution and by-laws, be it

Resolved, That the Committee on Admissions be and is hereby instructed to report to the Academy for election as resident Fellow no physician who is known to the committee to be in opposition to the code of ethics of the Academy, and who, as a consequence, can not consistently sign the by-laws of the Academy.

Resolved, That these instructions to the Committee on Admissions be continued in force until the American Medical Association shall have modified or repealed its code of ethics, and such modification or repeal shall have been adopted by the Academy, or until the Academy shall have modified or repealed its by-laws referring to medical ethics.

Dr. Gouley moved that reconsideration of the vote on the resolution instructing the Committee on Admissions be indefinitely postponed. Seconded and carried.

It is claimed that the passage of these resolutions was secured through a packed house, brought about through the medium of a secret circular.

On the motion of Dr. A. L. Loomis, duly seconded, these resolutions were rescinded by a large majority vote, leaving the national code intact and the qualifications for resident Fellowship as formerly required by the by-laws.

To those who have forgotten the transaction alluded to it may prove of interest to know that, according to the secretary's minutes of April 6, 1882: * "The report of delegates to the State Medical Society was then taken up, and, after some remarks, Dr. Austin Flint, Sr., moved that the report be accepted and the *further consideration of the topics and objects which it contained be indefinitely postponed*. Seconded and unanimously carried."

He had therefore the unpleasant alternative of either voting against resolutions which the Academy had previously sustained the *spirit of*, or of voting for them and repudiating the previous resolution carried by the society. Aside from this, the defect of the resolution, the one before the house, was not voted for as required by Section 5, Article XXV, of the by-laws, which requires that the yeas and nays on any question shall be taken without debate, and recorded in the minutes when called for by five Fellows present. It is a fact that the yeas and nays were not called for by five Fellows in accordance with the provision of the by-laws, and this fact can be ascertained from the minutes.

E. C. HARWOOD, M. D.

NEW YORK, October 18, 1883.

44 WEST FORTY-NINTH STREET.

Proceedings of Societies.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

THE annual meeting was held October 22, 1883, at the Hall of the Young Men's Christian Association, the President, DAVID WEBSTER, M. D., in the chair.

ELECTION OF NEW MEMBERS.—The Comitia Minora reported favorably upon the names of eighty-one candidates for membership. A motion having been made that action upon the names of these candidates lie over until after the election of officers, the motion was voted down, and the candidates were admitted to membership. Brevet Lieutenant-Colonel BENNETT A. CLEMENTS, Surgeon, United States Army, was elected an honorary member.

A CHARGE OF BRIBERY.—A question was raised, whether these newly elected members were entitled to vote in the election of officers, and, it having been decided that they were so entitled, Dr. ISIDOR P. OBERNDORFER asked if a member's vote could be challenged on the score of bribery. "Certainly," said the President; whereupon Dr. Oberndorfer was understood to say: "Then the votes of all these eighty-one gentlemen may be challenged." This incident gave rise to some commotion for a short time, but, as it was apparent that no challenge had actually been offered, the meeting proceeded to ballot for the election of officers, Dr. HENRY G. PIFFARD, Dr. EDWIN F. WARD, Dr. WILLIAM T. WHITE, and Dr. WILLIAM T. ALEXANDER having been appointed tellers. The balloting occupied upward of two hours, at the end of which time the tellers retired to count the votes, and the business of the meeting was proceeded with.

AMENDMENTS TO THE BY-LAWS.—Due notice having been given, the following amendments were adopted:

* The report cited referred to the New York State code, and, as it was not in accord with the code of the Academy, it was thought best to bury it, which was done with the full assent of all Fellows present; but, a year or more subsequent, it was in effect unwisely and unlawfully resurrected, for what purpose, can not be appreciated, but its effect was to cause, what Dr. Flint, Sr.'s, motion was intended to avert, bitter feelings and unpleasant commotion among the Fellows. It is now hoped that, as the Academy is again restored to its original basis, scientific work will be renewed, and peace and harmony will forever prevail within its walls.

Article 1, CHAPTER XII, shall be amended as follows: "When any physician or surgeon applies for admission into this society, he or she shall place his or her medical diploma with the blanks, hereunto appended, properly filled out and signed, in the hands of the secretary, who shall lay them before the Comitia Minora, whose duty it shall be to examine the same, and, if it approve thereof, shall grant him or her a certificate of membership, subject to the approval of the society.

1. BLANK FOR APPLICATION.

....., 18....

To the Secretary: The undersigned, residing at....., a graduate of..... in the year 18...., and registered at the County Clerk's Office, applies for membership in the MEDICAL SOCIETY OF THE COUNTY OF NEW YORK, and furnishes the accompanying memoranda for permanent record:

Name in full (including middle).

Born (insert town, county, State, and date, giving month, day of month, and year).

Attended school (insert names of schools, teachers, and locality). Graduated in arts or sciences (insert name of college and year of graduation. If not graduated, how long in college?).

Commenced the study of medicine in the office of, or with (here insert name of medical preceptor and his residence).

Attended lectures at (insert name of college and date of graduation).

Was a resident in hospital (insert name of hospital and length of service. If time was spent abroad in the study of medicine, mention the locality and length of time).

Commenced the practice of medicine (insert date and locality). Subsequently practiced at (insert subsequent place or places of residence).

Reside at present at (insert residence).

Have held (insert places of honor or trust held and resigned; also those now held; also membership in societies; also prizes received; also dispensary or college appointments filled).

Served in army or navy (state duration of service, with dates; also field of labor; also rank held).

Subject of thesis.

Insert titles of any publications.

Elected a member.

NEW YORK.....188

(Signature).....

2. BLANK FOR RECOMMENDATION.

....., 188....

To the Secretary: The undersigned being personally acquainted with Dr....., of No....., a graduate of..... in the year 188...., recommends for membership in the MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

Chapter XVII shall read as follows: "No member of this society shall assume any sectarian designation indicating that his practice is based on any special doctrine or dogma, or specified method of treatment."

Chapter XVII shall become Chapter XVIII.

SOARLET FEVER IN HORSES.—Dr. JOHN C. PETERS gave a short verbal *résumé* of the report of a committee appointed to investigate this subject. [The substance of what Dr. Peters said has already been published.]

DR. OBERNDORFER'S CHARGE OF BRIBERY.—Dr. F. R. STURGIS called upon Dr. Oberndorfer to explain what he had meant when he referred to bribery in the early part of the evening; and added that such remarks amounted to a very serious matter.

Dr. OBERNDORFER explained that he had meant to assert that bribery had been attempted with a member of the profession, whom he would not now name, by a representative of one of the parties in the ethical controversy—he would not say which one—to induce the person in question to become a member of the society, the object being to gain his vote in the election now in progress. He was ready to substantiate his assertions before the proper committee, but not now. He had stated in regard to the eighty-one newly elected members that their votes might be challenged, but he had not intended that that remark should have any connection with what he said about bribery.

On motion of Dr. STURGIS, the matter was referred to the Comitia Minora.

THE ELECTION OF OFFICERS.—Dr. PIFFARD, on behalf of the tellers, reported that the whole number of ballots cast was 599, several of which were blanks. The vote stood as follows [the names of the old-code candidates are printed in Roman, and those of the new-code candidates in italics]:

FOR PRESIDENT: T. Gaillard Thomas, 220; *S. Oakley Van der Poel*, 375 (Dr. Van der Poel's majority, 155).

FOR VICE-PRESIDENT: Charles A. Leale, 215; *Andrew H. Smith*, 380 (Dr. Smith's majority, 165).

FOR SECRETARY: E. A. Judson, 210; *Wesley M. Carpenter*, 385 (Dr. Carpenter's majority, 175).

FOR ASSISTANT SECRETARY: P. Brynberg Porter, 215; *Charles H. Avery*, 380 (Dr. Avery's majority, 165).

FOR TREASURER: Henry D. Nicoll, 208; *Orlando B. Douglas*, 384 (Dr. Douglas's majority, 176).

FOR CENSORS: Charles McBurney, 224; *Frederic R. Sturgis*, 385; Richard H. Derby, 208; *David Webster*, 383; Charles S. Wood, 210; *Daniel Lewis*, 377; Charles Hitchcock, 213; *F. R. S. Drake*, 373; Thomas H. Birchard, 215; *Joseph W. Howe*, 378. (Dr. Sturgis's majority, 161; Dr. Webster's, 175; Dr. Lewis's, 167; Dr. Drake's, 160; Dr. Howe's 163.)

NEW YORK MEDICAL AND SURGICAL SOCIETY.

A STATED meeting was held May 26, 1883, Dr. A. C. Post Chairman.

INTERNAL CANCER WITH OBSOURE SYMPTOMS.—Dr. A. B. BALL related a case as follows: A woman, forty-five years of age, past the menopause, began, in the early part of the summer of 1882, to fail in health without particular symptoms except those of general weakness. There was slight diarrhœa, from two to four passages a day, from July until some time in January, after which time it ceased. The pulse was 120 from July until January, and the patient complained of palpitation of the heart. There was also projection of the eyes, and exophthalmic goitre without enlargement of the thyroid gland was suspected, but the relatives said that the projection of the eyes was normal. The patient was seen in consultation by Dr. Du Bois and Dr. Draper. A diagnosis was not reached. In January the pulse fell to about 90, the diarrhœa ceased, there were no symptoms of renal disease, there was no elevation of the temperature, there was no acute pain. In March there was evidence of slight accumulation of fluid in the abdominal cavity, amounting, three or four days before death, perhaps to several quarts. Palpation revealed a hard mass beneath the fluid, which was believed to be cancer of the left ovary. The patient went to the country for a short time, and soon after her return to the city a marked diminution in the size of the abdomen took place, accompanied by the passage of a large quantity of urine. Four days later she died. Dr. Ball had not seen the patient from the time she went to the country until her death. The post-mortem was made by Dr. Ferguson, who found a large mass in the left

iliae region and the anterior part of the abdominal cavity, which was turned out *en masse*, and was found to be composed of a portion of the large and small intestines, the left ovary, the bladder, the vagina, and the uterus, matted together. The interior of the mass was cheesy and purulent; the inner surface of the bladder was studded with cancerous nodules; the uterus, the vagina, and the ovary constituted one mass of scirrhus. The mesenteries were all involved in the disease. The kidneys were not cancerous, but showed commencing degenerative changes. There were cancerous nodules of the size of a walnut in the liver and lungs. There had been no pulmonary symptoms during life. The patient had had a good appetite, but was emaciated. A cyst as large as an orange was attached to the mass mentioned, which doubtless was the tumor that had been felt, at the examination, lying to the left, and supposed to be attached to the left ovary. Afterward, by the growth of the mass, it had been pushed toward the median line. There were also some smaller cysts.

THREE CASES OF EXTENSIVE BLOODY OPERATIONS UPON THE FACE.—The Chairman presented the cases. [See p. 456.]

A CASE OF INJURY OF THE SPINE.—Dr. H. B. SANDS related the following case as having a possible bearing upon the origin of certain spinal nerves. About three weeks ago a young man was brought to Roosevelt Hospital a few hours after having sustained an injury of the spine caused by a fall from the third story of a house. There was no external sign of injury, nor any evidence of dislocation or fracture. There was slight paraplegia, but the patient was able to move the feet somewhat, and had since decidedly improved. There were two sets of muscles, however, which were completely paralyzed. The feces passed involuntarily and without the patient's knowledge, and he had no power to empty the bladder voluntarily. There was no incontinence of urine, and over-distension was not allowed to take place, the catheter being used. The case would seem to point to nearly a common origin for the nerves supplying the sphincter ani and the detrusor urinæ muscles, while the origin of the nerve supplying the sphincter vesicæ was more distant.

The CHAIRMAN remarked that he believed primary incontinence of urine was a rare affection; incontinence was usually due to over-distension.

THE RESIDUUM OF WARBURG'S TINCTURE, AFTER EVAPORATION OF THE FLUID PORTION, FOR MALARIAL FEVER.—Dr. J. T. METCALFE had cured a great many cases of malarial fever, after quinine had failed, by administering Warburg's tincture. Certain persons, however, found this very disagreeable to take, and he had requested Frazer & Co. to evaporate the fluid constituents and fill capsules with the residuum. Two capsules contained the equivalent of half a fluidounce of the tincture. They produced the same good results which followed the administration of Warburg's tincture, and, of course, were free from the disagreeable taste which belonged to that preparation. They should be comparatively fresh.

Dr. W. M. POLK had used the capsules referred to with better results than by using quinine.

CHRYSOPHANIC ACID IN SKIN AFFECTIONS.—Dr. METCALFE also mentioned some cases of acne rosacea and one of chronic eczema of the face which had been entirely cured in a comparatively short time, after all other remedies had failed, by the local application of an ointment of chrysophanic acid, three grains to the ounce. The face of a gentleman had for a long time been very badly disfigured by an acne eruption, and was completely cured within six weeks by the application of the ointment. In a case of eczema the patient was directed to make the application to but a part of the eruption on the first occasion. The part to which the ointment was applied was completely cured, while the other portion remained unaffected.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Meeting of September 26, 1883.

THE DUTY OF THE HOUR; BEING AN EXAMINATION OF THE RELATION OF THE MEDICAL PROFESSION TO THE GENERAL USE OF ALCOHOLIC LIQUORS.—Dr. HENRY LEFFMANN read the following paper:

In his work on the descent of man, Mr. Charles Darwin, of blessed memory, remarks that he made, in the course of his studies, a large collection of the definitions which have been offered as expressing the distinctions between man and the lower animals. The primary object of this collection was to show the insufficiency of such definitions, but, unfortunately, the learned author abandoned his plan and the list was never published. I have always regretted this, because I was anxious to see if any one had been bold enough to sacrifice the honor of the race to its independence; in other words, to define the human being as the only animal in which natural passions are abused and unnatural appetites developed. Though it may be a pessimistic view of human nature, yet we can not avoid the conclusion that the definition is substantially correct. The history of races and nations presents us invariably with a picture of unbridled passions, the fierceness of which is but slowly and uncertainly assuaged by civilization, for, in the modern as well as in the ancient world, it is in the centers of intellectual development that the greatest license has been seen. Legislators, both of the civil and ecclesiastical order, have wrestled with these problems, and, in some forms of excess, have tried every expedient, from the most desperate repression to the most indulgent remonstrance, but with only partial advantage. Among the vices which appear to be characteristic of man under every climate and social condition is the use of alcoholic liquors; and although the evils of this indulgence have been vividly presented to every one, yet a determined effort to obliterate the habit belongs only to our own time.

In that almost exhaustive treatise on moral and religious polity, the Jewish and Christian Scriptures, we notice that the duty of total abstinence has not been inculcated either among Hebrews, although the daily duties of life were regulated with microscopic minuteness, nor among the leaders of the new dispensation, although they founded a most extended system of asceticism and self-denial. We are concerned, however, with the present, not with the past. Around us is a social system of great complexity. Though progress is slow, yet we need have no fear of its general direction. Each year marks too slight a movement to permit us to distinguish the result, but each century gives us a definitely recognizable advance, and shows clearly the tendency of the race to a higher and purer life. It is the text of my discourse to-night that the basis of this higher morality is self-restraint, and the basis of self-restraint is the influence of example. In the consideration of total abstinence, and the relation of the medical profession to its encouragement, we must clearly distinguish between the use of alcohol as a beverage and as medicine. With the question of its therapeutic indications and contra-indications we have absolutely nothing to do in this paper. As to the method and form of its clinical use, however, as will be shown later, very important questions arise.

I think I may safely assume that the use of alcohol is not necessary to the maintenance of ordinary health. Its physiological effects have been extensively studied, and concordant results have not always been obtained. I need not stop to reconcile these differences, for the greater portion of the published results is not germane to my subject, nor will it be necessary to devote time to the presentation of statistics. One authority will be sufficient, because it is an authority in whom opportunities of observation and experiment are combined with

sound common sense and accurate logic. Without desiring to slight the labors of other workers, I think we find in Parkes's "Hygiene" the whole subject of alcohol so thoroughly discussed as to render other authority superfluous. In this work it is established beyond question that the use of alcohol is not beneficial, that it does not increase the power of the system to resist extremes of heat, cold, or fatigue, and that, even in special cases in which stimulants appear to be needed to maintain the resisting powers, other substances may advantageously be used. It is certainly surprising to read that one of the most common opinions, I would rather say superstitious, about alcohol—that it assists the body in resisting cold—is without foundation. Scarcely any of the minor causes of drinking are more general than this, yet the unanimous testimony of those who have been in charge of polar expeditions is against its beneficial action in such vicissitudes, and some of these leaders have, after their first experiences, declared that they would not, on any subsequent voyage, take any person addicted to the use of stimulants. As regards the general effect of the continual use of alcohol on persons in ordinary health, I can not do better than quote briefly from papers read by well-known clinicians before this society two years ago. Dr. Wood says: * "Although I hold that the habitual use of alcohol is to well-fed persons not only unnecessary but positively harmful, it seems to me that in many cases of disease, and in those periods of life when by reason of age the body waxes weak, alcohol is found of great value. Under sixty years of age the daily employment of wine may for most persons be very well discountenanced. . . . It is notorious that in America almost every one in reasonable health consumes much more food than the system needs, so that any alcohol taken is added to that which is already in excess." Dr. Pepper holds † that the quantity permissible is very small, not more than one ounce and a half of absolute alcohol in twenty-four hours, taken much diluted, and only at meals. A very large number of persons, either from susceptible stomach or a gouty diathesis, can not safely take alcohol at all. Dr. Bartholow says: ‡ "As a stomachic tonic, alcohol is effective only in the case of those not habituated to its use. . . . That in time a catarrhal state of the mucous membrane is produced and a pathological secretion obtained, shows the impropriety of the long-continued use of alcohol as a stomachic tonic." Finally, although relating to the therapeutical use of alcohol, I can not avoid quoting some forcible and logical remarks made by Dr. Woodbury* in a discussion on the treatment of pulmonary consumption. "Nothing in clinical medicine is more certain than that the continual use of alcohol, in even moderate doses, stimulates the development of connective tissue all over the body; nothing in pathology more evident than the fact that alcohol is a prolific source of pulmonary disease; nothing in toxicology better established than the observation of the action exerted by alcohol upon the respiratory center. For this reason it is especially dangerous in pulmonary consumption."

It is, unfortunately, too true that no quotations from authority or rehearsals of statistics are needed to show the moral and physical injury done by alcohol. Directly and indirectly, it is a prime factor in the promotion of disease and crime; and, when we reflect upon the thousands of desolated homes and ruined prospects for which this agent is annually responsible, we can not wonder

at the sentiment which is slowly but surely developing in the community against all phases of industry or trade which have for their object the furtherance of the use of alcohol, nor can we doubt that to the success of the work of moral regeneration of our race the obliteration of these industries is essential. A powerful assistance in securing and maintaining sobriety would be to destroy the superstitious respect in which the various beverages are held. Non-medical persons are generally aware that physicians attribute particular values to particular liquors. In my own experience I have found very few persons who are willing to admit that they use liquor merely because they like it. They generally find some other reason—the necessities of the system, the advice of some physician, either to themselves or to some friend. One person uses beer because it is a tonic; another, because of its nutritious value, and so on—every reason but the real one, because they like it. Not a little of this popularity of liquor is due to the glamour of sentiment which attaches to it. Even the austere psalmist, who, with the exception of a single sin, "did that which is right in the sight of the Lord," has praised the "wine that maketh glad the heart of man." And for ages poets and prose writers have extolled the qualities of stimulating beverages and the romance of their manufacture. In our time, however, these sentimental features are but imaginary. Nothing in the present methods of producing liquors is of a character to make us respect them as types of poetic or convivial relations. The wine that stands on our tables no longer shows in its ruddy color the rainbow tints—

"Caught where the morning sunbeams, stooping low,
Have kissed Grenada's plain."

Nor does its aroma repeat

"The dainty perfumes of the East
That Horace used to praise."

No, the suggestions that are now called up by those who know the facts are the suggestions of the fourth floor of a Front Street warehouse, where rectified spirit, animal charcoal, glycerin, saponified cotton-seed oil, aniline red, burnt sugar, *et hoc genus omne*, are being mixed together and transferred to casks and bottles ornamented by lying labels. The foaming tankard of malt liquor no longer suggests the

"—house where nut-brown draughts inspire,"

but the images now appropriate are those of bloated workmen, aloes, quassia, and the hop substitutes, salicylic and boric acid, baking soda, gum for preserving froth, and beer-pumps for producing it. In short, no romance belongs to our alcoholic beverages. They are the products of influences allied with the lowest levels of mercantile honor, and their touch is corrupting.

In an article read before this society two years ago,* I put forward the view, that when alcohol is to be used by physicians it should be used as such, and not in the form of special manufacturers. I can not express myself better than by my words on this occasion, as follows:

"We know that liquors prepared by strictly natural methods are not constant in composition; we know that under the exigencies of trade additional conditions of variations are produced, and even complete substitution brought about. I have for some time thought that the best way to secure entire constancy in the therapeutical use of alcohol would be to have the preparations made up by regular prescription, or by printed formulæ in the Pharmacopœia. The substances which exist in wine, beer, or brandy are in accidental mixture; some are useful, others useless. Why should we not have the useful articles properly com-

* "Is Alcohol a Food?" "Proceedings Phila. Co. Med. Society," vol. iii, p. 135.

† "Effects of the Prolonged Use of Alcohol on the Nervous System and Organs of Special Sense," *op. cit.*, p. 139.

‡ "Alcohol: Its Therapeutical Uses Internally and Externally," p. 127.

"Proceedings Phila. Co. Med. Society, vol." iv, p. 175.

* "Medical Relations of the Commercial Adulteration of Wines and Liquors," "Proceedings Phila. Co. Med. Society," vol. iii, p. 132.

bined by competent hands and the useless omitted? . . . And the physician, instead of ordering a special wine, will simply prescribe such preparations as may be necessary of alcohol, water, flavoring ethers, and astringent or bitter principles." These prescriptions, like those containing other powerful ingredients, should be renewable only at the instance of the physician.

I have lately learned with much pleasure that Dr. A. W. Miller, of this city, a gentleman well known to most of the members of the society as an experienced pharmacist, is about to publish a paper advocating a similar view. Dr. Miller, indeed, expressed such opinion publicly several years ago, although I was not aware of it then. His large experience in the manufacture of flavoring, coloring, and other materials used in liquor imitation, gives him the right to speak with authority, and I find, by my conversation with him, that we are entirely in accord. In his paper he intends to call attention to the fact which I would not have time to consider, that, in wines and brandies, factitious articles are sold at high prices, and thus the practice of ordering such articles exposes patient to both deception and robbery. Not the least of the injuries which are done to the community by the laxity of physicians in reference to the use of liquors is the encouragement which is thus given to the sale of quack medicines under the guise of bitters and tonics. No greater fraud is put upon the public than the preparations which are advertised under these names. They are alcoholic beverages in their most dangerous and insidious form. I have this week examined one of the most extensively advertised of the lot—Warner's Safe Tonic—and I find it to contain a considerable amount of alcohol, in association with some vile combination of sirup and bitter extract. When it is remembered that the miserable stuff is bought at a price much above its value, and is used mostly by persons already somewhat out of health, we must see that the harm done is incalculable. Yet the popularity of these articles is largely due to the fact that they meet what most people believe to be a necessity in disease, an alcoholic tonic. During the last few years several eminent physicians and chemists, in this country and abroad, have gone almost into spasms over a knowledge of such adulterations as the use of alum in baking powders, glucose in candy, and oleomargarine in butter—all trifling and non-injurious substitutions; but we hear very little about the far more dangerous preparations of the class just alluded to. The most striking evidence of the profoundly misguided condition of the public mind on these topics was well shown lately in New York, when the officers of the Business Men's Moderation Society gravely condemned the use of the harmless glucose in beer, and then gave, inferentially at least, certificates of wholesomeness to beer containing between four and five per cent. of alcohol. The quack medicine mentioned above has with each bottle the official certificate of the professor of chemistry of the University of Rochester, stating that the preparation is free from deleterious ingredients. I feel sure that statements like this could not be made if medical authorities were true to their own knowledge on these questions.

It is in view of the points which I have here enumerated that I feel obliged to lay before this society, and, through its published proceedings, before the world, the accusation that the medical profession is responsible for a very large portion of the misery which alcoholic beverages produce, and I declare that the time has now come when a stand should be taken in favor of abstinence. I believe that it is established by the citations I have given that alcohol is not needed by healthy persons. I know that many non-medical persons use liquor because of the general approval of it by the medical profession, and I think it can be demonstrated that, although alcohol itself is a substance of great value, alcoholic beverages are entirely unnecessary. ¹

late years, although physicians have assumed the right to speak broadly upon many questions affecting public health and public morals, they have been singularly conservative as regards the evil of moderate drinking. Yet it seems to me that sewer construction, registry laws, quinine pills, river pollution, ethical innovations, etc., on which topics so much energy has been expended recently, do not approach in magnitude the reform which is here urged.

The pollution of a river water by organic matter before it reaches a city reservoir is rarely so serious in its effects as the pollution of it by alcohol after it leaves the hydrants, and the dangers of Rye Beach, of which we have heard so much, are trifling compared with the dangers of rye whisky, or what is labeled as such.

The learned professions are potent influences in moral reform, and for many centuries law and divinity have exercised much more control over the race than has medical authority. This relation is now rapidly changing. The questions of civilization are regarded as practical problems, largely medical in character, and the direction of education is passing into the control of the scientist and physician. Both the lawyer and divine have recognized alcohol as a foe to public and private virtue, for courts now frequently regard intoxication as an aggravation rather than as an excuse for crime, and the almost unanimous temper of churchmen is against any form of indulgence in stimulants; even the time-honored employment of wine in communion is not sufficient to maintain its use, and unfermented wine is now a familiar article of commerce. Let us, then, begin at once to discharge our duties, and ally ourselves openly with the laity, who, though lacking in scientific knowledge, have the good of the community at heart. Let us recognize that, while many evils claim our attention, the importance of a firm stand in favor of total abstinence is urgent, and is indeed the "duty of the hour."

The PRESIDENT stated that the points presented for discussion were: 1. That the use of alcohol in any form and in any amount by persons in ordinary health was deleterious. 2. That the medical profession, by its lax attitude on this question, was responsible for much of the prevailing abuse of alcoholic liquors. 3. That if alcohol was to be used at all, it should be given as such, and the prescription should be made non-renewable, as with other powerful medicines.

Dr. J. T. ESKRIDGE, in opening the discussion by request of the President, said: I like the practical and novel way in which the subject has been treated. It will attract attention, and, I hope, serve to make the members of this society, and of the medical profession in general, consider their own responsibility for the abuse of alcohol. One of the conclusions at which the writer of the paper has arrived is, "That the use of alcohol, in any form and in any quantity, by persons in ordinary health, is deleterious." This is a broad and sweeping statement, and, while in the main it is correct, circumstances may arise when alcohol may be administered to persons in health with benefit. Dr. Percy's experiments showed that the free use of alcohol tends to prevent the solidifiability of fibrin, and thus renders wounds difficult to heal; and those of Vierordt and Prout, that less carbonic acid is given off in the exhalations by the breath under similar conditions. Bonehardat first pointed out that alcohol darkens arterial blood. These results were obtained by experimenting upon subjects whose stomachs had been overcharged with alcohol, or into whose veins the spirit had been directly injected. They show the poisonous effects of alcohol, and, reasoning from these, it by no means follows that the administration of small quantities well diluted is injurious to health. But observations are not wanting to prove the evil effects of alcohol on healthy persons when taken in small quanti-

ties for a considerable length of time. Professor W. B. Carpenter, a strong advocate of temperance, in his admirable prize essay on the "Use of Alcoholic Liquors in Health and Disease," after describing the baneful effects of alcohol on mind and body, when taken in small quantities several times daily for a length of time, frankly admits that its temporary administration to persons in health, on certain extraordinary occasions, is attended with decided benefit. Professor Miller, of Glasgow, in an excellent review of the subject, entitled "Alcohol: Its Place and Power," arrives at conclusions almost identical with those reached by Professor Carpenter.

I am satisfied that persons in health, under ordinary circumstances, do not need an alcoholic stimulus, and that, if its administration is attended by no good results, evil only follows the use of alcohol at such times; but, on the other hand, I am convinced that circumstances do arise when, if alcohol is properly administered to persons in health, its good effects far outweigh its evil; and that there are conditions, short of what we are accustomed to call disease, which are improved by the temporary and judicious employment of alcohol. Bodily and mental labor that can not be endured without resorting to artificial stimulants had better be left off; but times come in the history of many persons when they are not their own task-masters. A great deal may depend upon a few hours' work. Tea and coffee may not be sufficient stimuli, and a little alcohol taken at these times will allow of an extra strain being made upon the system. The use of alcohol must not be often repeated for the purpose of increasing the power of endurance. It must be remembered that a stimulus in these cases acts the part of the spur to the tired horse. It probably does not directly add force to the individual, but it enables him to call more upon his latent powers, and, of course, the exhaustion which follows is all the more profound by the reason of the extra strain upon the vital forces, made possible by the use of alcohol. Again, the appetites of some persons have been rendered capricious by the process of coddling, and those of others lessened, and the power of digestion weakened by worry and over-mental exertion, so that the simplest articles of food can not be digested properly. To such the administration of a little wine, with a bitter tonic, before meals, for a week or two, and subsequently a bitter tonic given before meals, and wine during or immediately after the ingestion of food, is followed by admirable results. In all these cases the use of alcohol must be cautious and temporary, and not allowed to be continued longer than is absolutely necessary. I agree with the statement made by the reader of the paper to-night, that below sixty years of age a person is generally not benefited by the use of alcohol in health. I know, indeed, of a case in which it did not become necessary to resort to it before the ninetieth year.

In regard to the use of alcohol in phthisis, to which a casual reference has been made, I have very strong convictions of its value when properly employed. In this disease, when pulse is rapid and temperature considerably elevated, alcohol is contraindicated, but in the more chronic cases, when respiration is difficult, and pulse and temperature nearly normal, its beneficial effects in prolonging life are evident to every one who has given it a fair trial. Professor Flint speaks in the highest terms of alcohol in phthisis. As a preventive of phthisis, alcoholic stimuli have their place and power. It is well known that in the same family several children, whose parents have suffered from phthisis, may die from this disease at about the same age. For these persons, if alcohol is occasionally employed judiciously, whenever vital force falls below its normal in them, I have no doubt that in many instances the fatal disease might be prevented.

To the second proposition I may say that I do not know of

any case in which the use of alcohol in disease, under direction of a physician, gave rise to drunkenness. Some time ago Dr. Hamilton, in a discussion before this society, mentioned a case in which a patient became a drunkard in consequence of the use of alcohol in typhoid fever, but it appeared on further inquiry that the man was an habitual drinker before the disease occurred. Lax prescribing, however, may easily become a serious error. It is important that, if alcohol is ordered, the quantity, form and time of taking should be indicated. It should be taken only at meals. This periodic and formal use of it will make the patient willing to stop when required. I admit that, if we consider that alcohol is injurious in health, we must regard its use in social gatherings, and especially in those composed of medical men, as wrong.

In reference to the last points, I can not speak from experience. If the adulteration is as extensive as pointed out in the paper, then the author's view, that alcohol should be used as mentioned, is correct. I, however, doubt if we can make, extemporaneously, mixtures which will take the place of natural liquors.

Dr. MILLS said: I would not wish to be regarded as an advocate of anything else but temperance in the best sense of the word, but the question of the influence of the moderate use of alcohol upon intellectuality and the longevity of intellectual workers is one of considerable interest, from what might be termed a biographical point of view. During the International Medical Congress of 1876 one of the English delegates expressed the opinion, in words which I do not exactly recall, that the intellectual productions of men who did not use alcohol at all were not of a character to indicate the value of abstinence. Many distinguished men who have lived to a comparatively advanced age—the English lord chancellors, German thinkers, and well-known American statesmen, for instance—used alcohol in moderation throughout their lives. I simply introduce this point for discussion. About the evils of the abuse of alcohol no doubt can exist.

Dr. WOOD: I consider the first proposition advanced by the author of the paper to be untrue; it is entirely too sweeping. To say alcohol is deleterious in *any* form and in *any* quantity in health is to say that one would be injured by simply smelling a bottle 'of whisky. I am fully convinced that we do not need alcohol in health, but indulgence in it moderately, on occasions, is probably no more hurtful than over-eating. I have seen, at social gatherings, total abstainers, while standing apart from the general company and congratulating themselves upon their superior virtue in not indulging in stimulants, gorge themselves beyond repletion with the food set before them, much to their stomach's distress. The moral question involved is the old one of use and abuse—whether I must forego the use of a thing because some one else abuses it. Are we to abstain from a certain amount of pleasurable indulgence because of the example which that indulgence offers to others? I do not believe in attempting to force total abstinence, because I do not believe that the movement will accomplish the desired result. Not long ago I was traveling in Kansas, and I met a prominent prohibitionist, a member of the Central Committee of the State, whom I questioned about the success of the prohibition movement, asking, *inter alia*, if they had destroyed the grape industry, as the law directed, in the wine-making districts. He replied that they did not expect to do this in those places. Here was an admission of the weakness of the cause, for where the manufacture and use of wine were now most active was the least hope of abolishing it. In the same car was a traveling salesman on the verge of delirium tremens, and I asked him as to the effect of the liquor laws in Kansas. He replied: "I can get a drink of whisky anywhere in Kansas for fifteen cents."

The Scandinavian method of dealing with the temperance question seems to me more practicable. In Sweden and Norway the country is divided into districts, in each one of which only one tavern is allowed. The licenses are sold at public auction. The temperance people have combined and bought up the licenses. They are obliged to open the tavern, but they can adopt such regulations as will prevent the excessive use of alcohol by those who frequent the place, and also employ all moral means to persuade men not to drink at all. I do not think that the adulterations of liquor are as harmful as has been stated by the lecturer. Liquors and wine are artificial products always. I think that good liquors can be easily obtained. I do not agree with the proposition that medical men are responsible for the habit of drinking to excess; on the contrary, the example and teaching of the medical profession have done much to diminish the evils of intemperance.

Dr. O'HARA: In reference to the remarks of the last speaker, let me read the following from Richardson ("Induced Diseases of Modern Life," page 232): "Speaking honestly, I can not, by any arguments yet presented to me, admit the alcohols by any sign that should distinguish them from other chemical substances of the paralyzing narcotic class." If this view be correct, we can have no doubt that alcohol is injurious in health, and that it does not serve as food. We are too much under the ideas of Liebig in this matter. For my part, I can not see that the total abstinence movement is a failure, or that the views advanced in the paper are erroneous. They are the views which have been advocated by high authority, in the International Medical Congress in 1876, and other scientific bodies, for instance. The medical profession may be responsible indirectly for much of the excessive drinking, through the idea, scattered, but now passing away, that it was food. I have myself learned by experience the evils of too much confidence in alcohol, when I thought it was food, and now watch it closely as a medicine. As to the cases narrated by Dr. Eskridge, they can not be regarded as cases of healthy persons, and the use of alcohol in treatment of them is a question of therapeutics, not of hygiene. Medical men may certainly accomplish a good deal by the teaching influence of example. I recall an instance in which brandy was used for dyspepsia; the patient, it is true, got rid of the dyspepsia, but he complained frequently until the day of his death, which was superinduced by liquor, that he made a bad swap, and would rather have held on to his dyspepsia.

The conclusions of Dr. Hunt's paper were adopted by the International Medical Congress, 1876, and ordered to be transmitted to the National Temperance Society, the Women's National Christian Temperance Union, and the Friends' Temperance Union of New York. They were: 1. Alcohol is not shown to have a definite food value by any of the methods of chemical analysis or physiological investigation. 2. Its use as a medicine is chiefly that of a cardiac stimulant, and often admits of substitution. 3. As a medicine, it is not well fitted for self-prescription by the laity, and the medical profession is not accountable for such administration or for the enormous evils arising therefrom. 4. The purity of alcoholic liquors is, in general, not so well assured as that of articles used for medicines should be. The various mixtures, when used as medicines, should have a definite and known composition, and should not be interchanged promiscuously.

Dr. TYSON: This question is one very difficult to discuss; both parties are apt to go to extremes. Dr. O'Hara's remarks are a case in point, for the injurious effects to which he alludes are the effects of the use of alcohol in excess and not in moderation. It must have been the experience of all practicing physicians to see many cases which are benefited by the moderate use of alcohol, especially at meals, while in many aged per-

sons its use is very appropriate, and even necessary. I am not prepared to deny altogether the correctness of the second proposition offered in the paper. I think there may be some ground for it, yet I do not know a single case in which the recommendation of the use of alcohol in disease has resulted in establishing a habit of drinking. I recall a case in which a gentleman was advised by a non-medical friend to use whisky for dyspepsia. It was tried, and, finding good results from it, he continued using it in small amounts daily; the use was kept up until one day the patient found the bottle empty. He missed his usual dose so greatly that he was forced to realize that he had been drinking, and never used the liquor again. It may be laid down as a rule that it is not safe for physicians to advise the regular use of alcohol for dyspepsia; it may lead to an habitual use of stimulants. As to the third point, I think that, in view of the fact that it is still possible to get pure wines, especially if we are satisfied with domestic wines, the flavor and other properties which made them more acceptable to the patient justified their continued use; but I, for one, am willing to try the effect of pure alcohol properly diluted in cases where alcohol only is indicated.

Dr. HAMILTON: Moderate drinking, it must be remembered, is very often the road to immoderate drinking, and therefore the physician, whose influence in this connection is paramount, should sedulously avoid the too frequent and too liberal use of liquor, especially in young subjects. In the low forms of fever, or in chronic, wasting disease, such, for instance, as pulmonary consumption, to which allusion has been made, it is often of great advantage, and in the latter disease, where expectoration is profuse, but unaccompanied with much fever or difficulty in breathing, it may prolong life for an indefinite period. The custom of drinking in the wealthy and fashionable circles may still be said to prevail with tyrannic power, and in ordinary social reunions the same practice is common. The influence of wealth and fashion is dominant, and until some amelioration in this connection is manifest, no general temperance reformation need be looked for in the people at large. The allusion to the adulteration of wines and stronger liquors was deservedly made, but it occurs, doubtless, much more frequently in regard to the finer and more costly than to the cheaper liquors, and the perfection to which this adulteration has attained is simply notorious.

Dr. JAMES C. WILSON: I am much pleased to see this subject before the society. It is a subject which ought to be agitated, because the agitation will bring out the truth. I think that the propositions rather overstate the case, and somewhat weaken the points advanced. Independently of law, church influence, and local politics, a widespread popular sentiment is developing in favor of temperance, but not of total abstinence. A feeling against excessive indulgence is growing steadily in the community. It is now considered "bad form" to drink to excess at social gatherings, and young men especially are much more restricted than formerly. The three-bottle men of earlier days are now unknown. It is, however, going to an extreme to put the proposition that the use of alcohol, in any form and to any extent, is deleterious. Many persons can use alcohol in moderation, and derive comfort from it without injury. I do not agree with the second proposition. Respectable medical men are not lax in their attitude on this question, but are accustomed to caution their patients in regard to the dangers of the use of alcohol. Most of them direct the amount to be taken, and fix a time for discontinuing the use, just as they do with other powerful drugs. As regards the suggestion to use alcohol alone, it appears to be open to some objections. It is not possible to imitate the different wines. No formula of the Pharmacopœia or prescription could produce the perfect mixture which we see in natural wines, which are often so specifically beneficial.

Dr. FRANK WOODBURY said: I have been much interested

while listening to the paper, and, in the main, sympathize with its teachings. I think that the propositions submitted for consideration were purposely framed so as to excite discussion, since they are not logical deductions from the paper, and indeed have not been presented as such. The alcohol question is a complex one; it is a great social and moral problem, as well as a scientific and medical one. The subject as presented this evening has at least three aspects: the use of alcohol in any quantity in health—this is a physiological question; its employment by physicians—a medical question; and the right of physicians to prescribe it—which is a moral question. This moral question is really the principal one of the paper, as is shown by its title, "The Duty of the Hour." With regard to the question as to its injurious effect when used in health in any quantity, I would ask, first, what is meant by a state of health? If a physiological definition is accepted, then no person living under the artificial conditions of civilization can be in a state of perfect health. Ordinary health is merely an approximation toward physiological health; and if the utility of alcohol is acknowledged in the condition of disease (which is merely any departure from the healthy standard), then the first proposition is answered by the lecturer himself in the negative. Then, again, concerning the use of alcohol "in any quantity," I think it worth while to recall the fact that not only is it without injurious effect in very small doses, but that in reality the organism can not escape from imbibing alcohol; it is omnipresent; it is in fresh bread and in ripe fruits, and even traces have been found in the air we breathe, provided there exist a certain amount of organic matter and the conditions of temperature and moisture necessary to fermentation. Even in the muscular tissue and urine of total abstainers a substance is present chemically indistinguishable from alcohol. In large doses every one admits that it is capable of destroying life by its own properties when taken into the system, and it is therefore a *poison*. Its use in much smaller doses, it must be admitted, may not prove incompatible with the enjoyment of long life and ordinary health; but in many cases its constant use directly induces disease and tends to shorten life. The fact that a substance is a poison, however, is not sufficient in itself to forbid its use in disease, provided that it be given in accordance with the teachings of science and experience. The physician with the longest experience of any present has just expressed his deliberate opinion that it is useful in low conditions of vitality and in slow convalescence.

With regard to the right of the physician to prescribe alcoholic liquors, the moral aspect of the subject, I hesitate to express an opinion, for fear of being misunderstood. I would suggest, at the outset, that in reality the treatment is not so entirely under the control of the physician as is implied by the question, Is it not the fact that it is the patient who employs the medical attendant, and if he is not treated in accordance with his ideas he becomes dissatisfied, loses confidence in his physician and engages another? A rough illustration may be given: When a Chinaman falls sick, he, as a rule, will, if possible, secure the services of the kind of physician that his parents and friends approve of. A sick Indian in the same way prefers the treatment of his medicine man to that of the most scientific post physician. Is it not also true that, in more cultivated communities, the physician who is called upon in the hour of sickness is the one whose thoughts and prejudices best agree with those of his patients? Patients certainly should not be allowed to dictate in the details of treatment, but their unrelinquished right to approve or reject the general plan of treatment can not be disputed. It may seem like a humiliating admission, but it is true that, in a community where the taverns far exceed the bakeries, total abstinence physicians will have more opponents than clients.

I hope that nothing that I have said will convey the impression that I approve of the use of alcoholic liquors in disease, given merely with a view to gratify the patient; if ordered at all, they should be given to obtain the physiological action of ethylic alcohol, which, on account of variation of strength and adulteration in ordinary liquors, may be best given in the form of dilute alcohol in order to secure both purity and exact dosage. This, I have learned, has been largely employed in Bellevue Hospital, where it was introduced by Dr. Gillette; by its use the medical effects of the drug are obtained, and the danger of encouraging the use of ordinary liquors is to a large extent obviated. In conclusion, I wish to express the opinion that the second proposition should be reversed, and it should read: "Physicians deserve great credit for inculcating more correct and scientific ideas with regard to the use of alcoholic liquors by the community." The great advance in the cause of temperance, in my opinion, is very largely due to the teachings of certain prominent physicians and the precepts and example of the great body of the profession.

Dr. LEFFMANN, in closing the discussion, said: I am dissatisfied with the direction the debate has taken, for too much time has been given to the discussion of the value of alcohol as a remedy, a point which I expressly excluded. While the propositions which I laid down are my convictions, and I believe they will all be ultimately recognized as true, yet I purposely worded them in an extreme form to make the debate more definite. No one, however, is justified in giving to the first proposition the strained meaning that Dr. Wood put upon it—namely, that smelling a bottle of whisky would be held as injurious. The language should be judged according to its intention. The remark quoted by Dr. Mills, in regard to the literary abilities of total abstainers, is also unworthy of the dignity of the question, and is not argument. Dr. Woodbury's suggestion, that alcohol must be used because patients expect its use, is surely not the true principle of medical practice. Patients are not to be the judge of anything in treatment. The success of homœopathy and kindred delusions is largely due to the erroneous and absurd view that patients may elect the system of medicine on which they are to be treated. Neither can one regard the fact of the occasional existence of alcohol or alcohol-like bodies in organic matter, in urine or in muscular tissue, or in fresh bread (which latter I doubt very much), as any argument for its use in health as a beverage. Several of the speakers have apparently regarded the paper as declaring the adulteration of liquors to be harmful, but this was not the ground taken. On the contrary, in two papers on alcohol previously read before this society, and papers read elsewhere, I have pointed out that the adulterations are cheats rather than poisons. It is the uncertainty and deception to which I call attention.

Although objection has been made to the third proposition on the ground that alcohol alone or simply diluted will not answer, yet we have these objections well refuted by the fact just stated by Dr. Woodbury, that in one of the New York hospitals such a preparation is regularly and successfully used.

The second proposition has been misunderstood. It has been taken to mean that the use of alcohol in disease under medical advice has resulted in drunkenness, but this is not the meaning. It is the habit of moderate drinking in health that makes drunkards, and it is to the indifference of the medical profession to this habit that the second proposition relates.

The whole question, it seems to me, is a most important one. The terrible effects of alcohol are seen in all directions, and if the restriction of it is needed—and I do not see how any one can doubt that fact—such restriction must only come by active assistance of those who know the facts best. It will never do to temporize with vice. No method will answer with any form

of crime or vice except continuous, unrelenting opposition. It is a mistake to suppose that widespread and deep-rooted habits are unconquerable. Did time permit, it could be shown that traits of human character, as vicious and deep-rooted as the tendency to drinking, have been eradicated by persistent effort, and what has thus been done can be done again. I am fully of the opinion that the tavern finds its best support in the idea, so general in the community, that physicians consider the regular use of a little alcohol not injurious. When the medical profession is true to itself, and teaches that alcohol should never be used except for a specific purpose and under continued medical advice, the tavern will lose its best hold on the community.

The statement of Dr. Wood, that he is fully convinced that we do not need alcohol in health, and that indulgence in it moderately on occasion is no more hurtful than over-eating, certainly leans in favor of my first proposition.

Miscellany.

THERAPEUTICAL NOTES.—*Piscidia Erythrina* as a Substitute for Morphine.—M. Landowsky ("Gazette hebdomadaire de médecine et de chirurgie," August 31, 1883) has found in a few experimental cases that *Piscidia erythrina* possesses valuable sedative and narcotic properties. It is a leguminous plant, which grows in the volcanic soil of Jamaica. It takes its name from the property it has of narcotizing fishes—a property which the natives have long put to practical use. In the case of a physician suffering from severe toothache, three grammes of an alcoholic extract of the bark (one part of bark to four of alcohol) were followed by a calm sleep of twelve hours, which did not leave any dullness or other disagreeable after-effects. In the case of six patients, suffering from various painful affections, M. Landowsky used *Piscidia erythrina*, instead of morphine, with happy results. "Without being conclusive, because of their small number, these experiments are nevertheless encouraging. If they result as it is hoped they will, our materia medica will have a precious substitute for opium, with, moreover, this advantage, that it does not cause headache or other malaise, and does not constipate."

Professor Ott, of Easton, Pa., ranks *piscidia* as a narcotic to which both the higher and lower animals are susceptible. In his hands it dilated the pupil, diminished the number of the respiratory movements, produced free salivation and diaphoresis, and lessened the frequency of the cardiac pulsations. In large doses it produced general paralysis and death from asphyxia. He found it to resemble morphine in many respects. He believes it can be used to advantage as an analgesiac and hypnotic in neuralgia.

Dr. Otto Seifert, of Würzburg, has observed good effects from *piscidia* in the obstinate cough of phthisis.

The Physiological Action of Barium Chloride.—Professor Sydney Ringer and Dr. Harrington Sainsbury, in a recent paper ("British Medical Journal," Aug. 11, 1883), detail the results of their interesting investigations respecting the physiological action of barium chloride on the circulatory system. The special object of the experiments was to determine whether the effects produced on the heart and vessels by the drug were due to its direct action on the tissues or to its indirect action through the nervous system. The animals used were frogs and tortoises. The conclusions reached may be summarized as follows:

Barium chloride resembles digitalis markedly in its action on the circulation. It retards the pulse-rate, increases the length and force of the cardiac systole, causing ultimately systolic arrest, decreases the caliber of the arterioles, and increases the blood pressure. All these effects are produced when the circulatory system is freed entirely from central nervous control, and they must therefore be due to the direct action of the drug on the tissues. The excised heart was arrested in full systole by feeding it with blood containing barium chloride. The local application of a dilute solution of the salt caused local spasm at

the point of application. It was impossible to affect the caliber of the vessels through the nerves apart from direct local action. "The therapeutic value of barium chloride yet remains to be determined. The drug is clearly a very powerful one, and in this respect is widely separated from its chemical analogue, calcium chloride. As to the direction in which clinical observation should extend, we get a clear indication from the digitalis-like action of the drug."

"Sulfurine," or Crystallized Liver of Sulphur, for Odorless Sulphur Baths.—A new liver of sulphur, under the name of "sulfurine," or crystallized liver of sulphur, is recommended ("L'Union médicale," Aug. 14, 1883) for use in the preparation of sulphur baths. By dissolving it in water it affords a bath having all the medicinal properties of an ordinary sulphur bath, without the disagreeable odor. "Sulfurine" is obtained by precipitating the sulphur from the alkaline sulphide of potassium. This eliminates the sulphuretted hydrogen, and reduces the sulphur to its molecular state. "Sulfurine" is the product of this operation crystallized. "Sulfurine" baths may be taken at home in ordinary bath-tubs, without fear of affecting the metal of which they are made. They are said to be very useful in the treatment of diseases of the skin, rheumatism, gout, paralysis, scrofula, chlorosis, and anæmia.

AMERICAN PHARMACY IN EUROPE.—The following extracts are from the "Monthly Magazine of Pharmacy, Chemistry, and Medicine," whose correspondent was in attendance at the great International Pharmaceutical Exhibition at Vienna. They are their own explanation: "Since I have mentioned America, I should not forget to say that Messrs. Parke, Davis & Co., of Detroit, have an important exhibit here, in which we find represented almost all that the apothecary's art can do in America. In the absence of important exhibits by English and French houses, the Germans are evidently pleased at the extent and beauty of the American display. A great portion of it is devoted to newer American drugs, which are as yet very little known in Europe, and are classed as raw products from which the pure active principles have not yet been extracted." "We are pleased to note that the same firm have been awarded the gold medal of the First Viennese International Pharmaceutical Exhibition, held at the Austrian capital from August 11th to 28th, inclusive."—*Editorial in Therapeutic Gazette*, October, 1883.

THE GREAT INTEROSSEOUS LIGAMENT BETWEEN THE ASTRAGALUS AND THE OS CALCIS.—Professor Struthers, of Aberdeen, writes as follows in a recent number of the "Lancet":

The fore part of this ligament is easily exposed on its outer aspect in the ordinary dissection of the dorsum of the foot, and useful views of the concealed part of the ligament may be obtained by transverse vertical sections made with the saw through the astragalus and os calcis; but even these two methods combined failed to give a satisfactory view of the ligament, or to enable us to see clearly the functions of its several parts. The following is the method I employ:

Take an ordinary ligamentous preparation of the tarsus. With the saw divide the astragalus into three parts, so that the narrow middle portion shall carry the entire upper attachment of the ligament. The middle portion should be about one third of an inch in breadth, but a little broader (five lines) in front. The inner cut should, in front, be close to the inner edge of the cartilage of the head, leaving a shaving of the neck with the middle piece, and, behind, be at the hinder end of the internal malleolar facet. The outer cut should extend from the fore end of the external malleolar facet to close to the inner edge of the groove for the flexor pollicis tendon. The sections should be vertical. Only a narrow margin of bone remains on each side of the ligament, so that the attachments and functions of the ligament may be clearly seen. If the section prove to be too thick below, it may afterward be sloped near the ligament. The demonstrator, however, will soon learn how to make these sections accurately and easily in the dissecting-room. The lateral portions of the astragalus should be left hanging to the os calcis by portions of the lateral ligaments of the ankle, or attached by catgut, and thus be readily replaced.

We now see the whole extent of the interosseous ligament from before backward, and its length, direction, and thickness at different parts, and can demonstrate the functions which it performs in relation

to the various movements of the astragalus or os calcis. The method is useful also from the way in which it presents for study the joints on either side of the interosseous ligament, and enables the parts to be again replaced. In making a dried preparation of the ligament by the above method, the lateral portions of the astragalus may be attached by a catgut cord, piercing them, and dipping into the os calcis below the ligament; so that when the cord is pulled the three pieces go into position.

I may mention also a method of exposing the interior of the ankle-joint, which may be combined in the same preparation with the above method of exposing the interosseous ligament. Having dissected in the usual manner the ligaments of the ankle and tarsus, divide the portion of tibia by an antero-posterior vertical median cut with the saw. If it is for the ankle-joint alone, the preparation may include several inches of the tibia; if it is for a preparation to show also the interosseous ligament by the above method, half an inch of the tibia will suffice and be more convenient. The two side-pieces of the tibia now fall asunder, displaying the whole interior of the ankle-joint and giving an inside view of the ligaments and their points of attachment. If the astragalus be then divided by the above method, the lateral ligaments of the ankle serve for the lateral pieces of the astragalus to hang on by. The three pieces of the astragalus may be replaced, and then the two sides of the leg, and thus the whole built up again. Such a preparation, with the facility which it affords for opening out the joints and again replacing the parts, will be found very useful in the anatomical school.

I have shown these methods for many years and to various teachers of anatomy, but, so far as I am aware, they have not yet found their way into any of the text-books.

CONGRESS OF SURGICAL AND ORTHOPÆDIC INSTRUMENT-MAKERS.—A congress of surgical and orthopædic instrument-makers took place at Frankfort-on-the-Main on the 10th, 11th, and 12th inst., to form an association for the purpose of improving the conditions under which the trade is carried on. The association consists already of one hundred and twenty manufacturers from various parts of the world. The executive committee consists of Messrs. Leiter (Vienna), Windler (Berlin), Walter-Biondetti (Basle), Krohne (Krohne & Sessemann, London), Simsky (Königsberg), Wendschuch (Dresden), Laibach (Lüttig), and Fischer (Freiburg-in-Baden).—*Lancet*.

THE "SANITAS" ABSORBENT PAD.—This contrivance is essentially a T-bandage, to be worn during menstruation. The perineal portion consists of absorbent cotton inclosed in a network of thread. The use of the pad has been explained to us, and we have no doubt that it will prove very convenient, especially during a sojourn away from home. The pad is made by Mr. am Ende, of Hoboken. Some of the pads are disinfectant.

COPPER AND CHOLERA.—An engineer, living at Westminster, has forwarded the following interesting information to the Académie des Sciences, and it has been communicated by that body to the members of the commission appointed to investigate the subject. In 1871 the writer visited the copper mines at Falun (Sweden). All the miners were impregnated with copper vapors, which pervaded the atmosphere and destroyed all vegetation, but had no deleterious effect on the human organism. When cholera raged in Sweden, the royal family took refuge at Falun, where no one had been attacked.—*British Medical Journal*.

NAPHTOL IN THE TREATMENT OF SKIN DISEASES.—Dr. Arthur Van Harlingen, of Philadelphia, reports in the "American Journal of the Medical Sciences" for October, 1883, the results of his experience with the use of this drug, which was first brought to the notice of the profession by Professor Kaposi, of Vienna, about two years ago. He finds it is one of the most efficient and agreeable remedies for scabies which has as yet been brought forward. Both in the rapidity of its action and in its beneficial effects upon the inflamed skin it is superior to any of the means ordinarily employed for the cure of this disease. Its exact place in therapeutics remains to be ascertained, but he is inclined to think that it will not prove an unimportant one. In eczema it has failed in his hands to give the same beneficial results as in Kaposi's.

In most cases of vesicular and in acute eczema generally its action is simply that of an irritant. On the other hand, it has a limited field of action in the cure of a certain number of cases of squamous eczema of the scalp. In his opinion, it is a valuable addition to our external means of treatment in psoriasis. Kaposi speaks well of it in psoriasis of the scalp in particular, and his experience would lead him to place it near chrysarobin and pyrogallie acid in effectiveness, without the neutralizing disadvantages of either of these drugs. In seborrhœa of the scalp naphthol is a decided addition to our means of treatment. While inferior in some respects to sulphur or carbolic acid, it has a certain range of usefulness which further experience will in all probability more exactly demonstrate. Naphthol is highly lauded by Kaposi in the treatment of hyperidrosis, but in Dr. Van Harlingen's hands it has failed entirely, although used strictly according to his formulae. He considers it quite valueless in this disease, so far as his experience goes. His experience leads him to regard its effects in ringworm as inferior to those of almost all the remedies at present used, and as almost entirely inefficient in most cases of tinea versicolor. In pediculosis he has had no experience, but in a single case of pediculosis capitis its action was favorable.

THE NEW BOSTON DISPENSARY.—The laboratory and dispensing department are said to have been fitted up in a most admirable manner, being the best appointed of any in the country. This branch of the institution will be under the personal direction of Professor Frederick Clark.

THE AMERICAN PUBLIC HEALTH ASSOCIATION will meet in Detroit November 13th, 14th, 15th, and 16th.

A REMARKABLE CASE OF MORPHINE POISONING.—In the first number of a new journal, the "Texas Courier-Record of Medicine," Dr. E. J. Beall, of Fort Worth, Texas, gives the following account of a case that occurred recently in his practice and that of his associate, Dr. W. A. Adams:

While somewhat under the influence of liquor, a man bought sixteen grains of morphine, and swallowed the whole amount at once. It is stated that there is no shadow of doubt that sixteen grains was the amount taken, and that he was not habituated to the use of any preparation of opium. In about an hour after swallowing the drug the man was found pretty thoroughly narcotized. There being no stomach-pump at hand, sulphate of zinc, ipecac, and warm water were "forced into the stomach," and the pharynx was tickled with a bunch of feathers—all to no purpose; vomiting could not be produced. Fluid extract of belladonna and citrate of caffeine were then injected subcutaneously, and flagellation and constant movement were resorted to. Such efforts it soon became necessary to abandon, and the livid man was laid down, when only an occasional respiratory movement was observable, and very soon respiration entirely ceased. Artificial respiration was kept up for twelve hours and a half, during a great part of which time the man's appearance was so desperate that some physicians among the bystanders were unkind enough to remark that it was done for effect on the crowd, and some of the latter even went so far as to propose that the officiating physicians should make way for the undertaker. Whenever the heart's action showed signs of failure, whisky and ammonia were used hypodermically. In all, about forty drops of fluid extract of belladonna and twenty grains of citrate of caffeine were used. "The careful use of the galvanic current" is mentioned as having been employed, but the method is not specified. The man recovered.

THE TARNIER FORCEPS.—In an admirable Report of the Section on Obstetrics and Gynæcology (reprinted from the "Transactions of the Medical and Chirurgical Faculty of the State of Maryland"), Professor William T. Howard, of Baltimore, says: "That Tarnier's forceps has great advantages over all others in delivering at or above the pelvic brim, or the two upper inches of the pelvic cavity, has, it seems to me, been demonstrated. But I have in two instances, in consultation, succeeded in accomplishing delivery at the inferior strait by their use; one, a right oblique occipito-posterior position, and the other, a brow-face to the left, when two experienced and skillful accoucheurs, as well as myself, had failed with Hodge's and Simpson's forceps. If properly

handled, Tarnier's forceps does not involve greater danger to either vagina or perinæum than the ordinary forceps. As a very general rule, however, the exception being an extreme necessity for speedy delivery, it is good practice to remove the forceps of any kind when the advancing head bulges out the perinæum and begins to appear between the labia; and especially ought this to be done when the perinæum is still rigid. Let the young physician, especially, ponder well Dr. Fordyce Barker's words: 'The operation should be performed slowly. I am never less than a half hour in bringing the head down from the superior strait, and in some instances I have been a full hour.'

THE USE OF THE COLPEURYNTER AS A PRELIMINARY TO FREUND'S OPERATION.—In the proceedings of the New York Obstetrical Society, meeting of February 6, 1883 (published in our issue for April 14, 1883, p. 412), it was stated by Dr. Lusk that Freund had found it feasible to raise the uterus even as high as the umbilicus by means of pressure with the colpeurynter for a week before the operation. Dr. M. B. Freund, of Breslau, writes to us, under date of October 5th, to call attention to the fact it was he (and not Professor W. A. Freund, of Strassburg, by whose name the operation is known) who first made use of this device. In an article contributed by Dr. M. B. Freund to the "*Zeitschrift für Geburtshilfe und Gynäkologie*," Band VI, Heft II, a copy of which he has kindly sent us, we find this statement: "*Den genannten Uebelständen glaubte ich durch Elevation des Uterus durch der Operation vorausgehende mehrtägige Kolpeuryse und durch letztere durante operatione am besten zu begegnen, ein Verfahren, zu dem ich durch eine Mittheilung von Hegar ("Wiener medicinische Presse," xviii, vom 14. Juli, 1871) geleitet wurde,*" etc.

THE GROWTH OF THE "LANCET."—We may pardon the "Lancet" for the following sexagenarian cackle, which appeared in its issue of October 6th:

"Within one day of the date of the present number 'The Lancet' will have been in existence sixty years. The late Mr. Wakley's modest venture was first issued on October 5, 1823. There are probably not ten practitioners in the United Kingdom who were at that time in the active practice of their profession and who can recall what was the first effect of the journal on the professional mind. 'The Lancet' was the original weekly journal for the advancement of medicine as a great power among the masses of the people. We may say so much, because no one now disputes the fact. There had been journalists in medicine before Mr. Wakley took up his pen. At that very time Dr. Roderick Macleod and Surgeon John Bacot, who had not long left the surgeoncy of the Grenadier Guards, were conducting a journal which, from a purely scientific point of view, was exceedingly well done, and was sometimes not badly illustrated. They, too, were the successors of other able editors, notably Dr. T. Bradley, Dr. Samuel Fothergill, and William Hutchinson. But these had all represented the profession in itself. The profession, the whole profession, and nothing but the profession, was their motto. Our founder took a different position. He took the people, the whole people, and nothing but the people, as his constituency; and while he never deserted the real and long-sighted interests of medicine, even as a compact professional body, he held by his text and preached from it until he succeeded beyond, far beyond, his own most sanguine expectations. In his preface to the first number of 'The Lancet,' Mr. Wakley tells to whom it was addressed. It was intended to be useful 'to the medical and surgical practitioners of this city—London—whose avocations prevent their personal attendance at the hospitals; to country practitioners, whose remoteness from the headquarters, as it were, of scientific knowledge leaves them almost without the means of ascertaining its progress; to the numerous classes of students, whether here or in distant universities; to colonial practitioners; and, finally, to every individual in these realms.' The last promise—which we have italicized—was the keynote of 'The Lancet,' and it is by that it has become known and recognized as being above all class and clique. The undertaking was, and has always remained, arduous. In carrying it out, medicine as a literature has had to be simplified; 'mystery and concealment' killed; 'ignorance and mystery' made 'synonymous'; 'ceremonies and signs' deprived of their charms; 'hieroglyphies and gilded serpents' deprived of their

power to deceive.' These things were to be destroyed, and new things were to be introduced. When we note that the first article in the first 'Lancet' was an introductory lecture to students at St. Thomas's by Sir Astley Cooper—a lecture, by the way, as fresh to-day as when it was delivered—we show, in part, the full life of a now sexagenarian work that has been conducted under an editorship which has but once changed hands, and which, at the death of the founder, twenty-two years ago, devolved as a sort of heirloom on his son, Dr. Wakley, the present editor. The first principles of free and independent journalism have been and will be faithfully maintained. To what extent the little double sheet has gradually increased, this day's impression, which consists of ninety-six pages, will indicate."

AN INTERNATIONAL MEDICAL EXHIBITION.—An international exhibition will be held at Nice, from December, 1883, to May, 1884. The co-operation of architects, engineers, medical men, and manufacturers of sanitary apparatus is invited, in order to make the sanitary and medical section a success. The section is divided into the following classes: Distribution and purification of water for domestic use; house drainage and sewerage; hygiene of public establishments, of houses, of ships; pharmaceutical preparations; mineral waters; medical and surgical instruments and appliances; veterinary medicine; hydrotherapeutics, medical gymnastics; life-saving apparatus, ambulances, etc.; special treatises bearing on the above mentioned groups; meteorology applied to climatology; meteorological observations; special treatises, plans, and charts. Applications for space are to be made to Edmund Johnson, No. 1 Castle Street, Holborn, London, England.—*Sanitary News.*

ARMY INTELLIGENCE.—*Official List of Changes of Officers serving in the Medical Department of the United States Army from October 13, 1883, to October 20, 1883.*—BACHE, DALLAS, Major and Surgeon. Assigned to duty at Willet's Point, New York. Par. 1, S. O. 238, A. G. O., October 18, 1883. — HUNTINGTON, DAVID L., Major and Surgeon. By direction of the President, will, until further orders, take charge of the office of the Surgeon-General of the Army and perform the duties pertaining thereto. Par. 3, S. O. 234, A. G. O., October 11, 1883. — STERNBERG, GEORGE M., Major and Surgeon. Granted leave of absence for one month, to date from October 6, 1883, with permission to go beyond the limits of the department, and to apply for extension of one month. Par. 3, S. O. 134, Department of California, October 4, 1883. — TAYLOR, MORSE K., Major and Surgeon. Assigned to duty at Fort Sill, Indian Territory. Par. 4, S. O. 210, Department of the Missouri, October 13, 1883. — HEIZMANN, CHARLES L., Captain and Assistant Surgeon. Granted leave of absence for six months, with permission to go beyond sea. Par. 3, S. O. 235, A. G. O., October 15, 1883.

NAVAL INTELLIGENCE.—*Official List of Changes in the Medical Corps of the Navy during the week ending October 20, 1883.*—Medical Director W. T. HORD and Medical Inspector C. J. CLEBORNE, ordered to the United States steamer Hartford, at Panama, on duty connected with a court martial. — Medical Inspector A. C. GORGAS, detached from Naval Hospital, Chelsea, Mass., November 10th, and ordered to the Naval Hospital, Mare Island, Cal. — Medical Director J. M. BROWNE, ordered as member of the National Board of Health. — Passed Assistant Surgeon A. C. HEFFINGER, ordered to temporary duty at Navy Yard, Portsmouth, N. H. — Passed Assistant Surgeon ROBERT WHITING, granted leave of absence for three months. — The orders of Surgeon W. J. SIMON and Passed Assistant Surgeon M. H. CRAWFORD, in last week's report, should read United States steamer Shenandoah, instead of United States steamer Trenton.

SOCIETY MEETINGS FOR THE COMING WEEK.—*Tuesday, October 30th:* Medical Societies of the Counties of Queens and Rockland, N. Y. *Wednesday, October 31st:* Auburn (N. Y.) City Medical Association; Medical Society of the County of Gloucester, N. J. *Thursday, November 1st:* New York Academy of Medicine; Medical Society of the County of Orleans, N. Y. (annual); Medical Society of the County of Ocean, N. J. (Tom's River); Society of Physicians of the Village of Canandaigua, N. Y. *Friday, November 2d:* Practitioners' Society (private).

Lectures and Addresses.

A LECTURE ON THE

TREATMENT OF GUNSHOT WOUNDS,

DELIVERED AT BELLEVUE HOSPITAL MEDICAL COLLEGE,

By SIR WILLIAM MACCORMAC,

SURGEON TO ST. THOMAS'S HOSPITAL, LONDON.

GENTLEMEN: When, some time ago, Dr. Dennis invited me to come and make an address before you upon any subject I might choose, I begged that he would excuse me, because I felt that the number of subjects worthy of bringing to your attention was so great that it would be impossible for me to select one from among them. He, however, speedily disposed of that objection by choosing a subject for me, and so I ask you not to regard me as responsible for my presence here to-day, but I desire you to understand that the whole responsibility rests upon him. The subject which Dr. Dennis has chosen—namely, the treatment of gunshot wounds—is a very large one, and so broad that it can not be worthily disposed of in a single lecture; moreover, it is one of very great interest and very wide application in surgery, and I must confess that I feel great hesitation in attempting to speak upon it at all in this place, because in this city, perhaps more than in any other with which I am acquainted, there are surgeons who have had a much larger experience in this branch in the late civil war than the surgeons in any other part of the world have. It seems to me, therefore, very much like “carrying coals to Newcastle,” as they would say in the old country, for me to speak to you on this subject at all. The vast experience of your surgeons in the late war is embodied in those excellent volumes issued by the Surgeon-General, which, for size, magnificence, completeness, and profuseness of illustration, are equaled nowhere else in the world. The other day I had the privilege of visiting the Army Medical Museum, under the supervision of the distinguished Dr. Williams, and there I saw examples of surgery, in specimens collected from far and wide, illustrating the effects and results of the treatment of gunshot wounds in recent wars. These showed such a wide experience in this branch of surgery that when I decided to speak to you I thought that neither the time nor the place was altogether fitting for me to make any very general remarks on the surgical treatment of gunshot wounds, and I thought you might be more interested in a brief account of my own personal experiences.

These experiences, or at least one phase of them, I think it is not unfitting that I should relate to you here. The special matter I wish to explain occurred twelve years ago in the Franco-German war, under the supervision of one of your own distinguished countrymen. I am only speaking the opinion often expressed by very competent authorities when I say that the ambulance service of that war was superior to any other ever known. At the head of that celebrated ambulance service was placed by the government a man known all over the world as well as here, and beloved by every one who knows him, Dr. J. Marion Sims. I

was connected with that ambulance service, and stationed in Paris, when our orders came to hasten to the camp of the contending army as soon as possible. We immediately started off fully equipped, and, after innumerable delays, we at length reached the encampment. We stopped near a place that was strongly fortified, and the opposing armies were not far distant from us. There was not a single uniformed soldier in the whole place where we were, and the only doctor I could find was an old French surgeon, who begged us to wait there till the wounded were brought in. We, however, pushed on to the railway station before halting, and while there, lying in our barracks, an incident occurred which was striking enough at the time. I was not asleep, though most about me were, when in the middle of the night a train arrived, or rather a strange sort of train made up of a cattle-truck attached to an engine, on which was the Emperor of the French, with two or three officers attending him. They stopped at the gate of the town and asked admission; they knocked and knocked, but no response was made, and so for one hour the Emperor and his officers stood there waiting for admission to the town before it was obtained.

There was nothing for us to do that night, but the next morning the disabled troops came pouring in by thousands, and we were very glad to accept of the only hospital there, which contained about four hundred beds, fairly comfortable and clean, and well enough fitted for the purpose. At dawn the battle began, and it lasted all that day. The wounded soon came in in great numbers, and all the beds were quickly filled; then the floor and the staircase were packed, every available house and church in town was crowded, all the country houses around the town for miles about were filled, and thousands of wounded men were thus disposed of. Of course, I need not say that all we surgeons, few in number, could do for so many sufferers was very little, but yet we did all we could. We were well equipped and had surgical appliances and instruments of various kinds, and we also had all the advantages of a hospital while working in the front rank of battle, where we were busy all day while the battle raged and shells were bursting about our heads. From our station we could see the German batteries on the rising ground in front of us training their guns on the French troops behind us, while the shot and shell flew over our heads. At times a stray shell would burst near us or strike one of our buildings, but it was evident that the shots were not leveled at us. An officer in the German army, whom I met the other day, told me that he was in command of the battery in front of us at that battle, and he had recognized our flag, which marked the hospital, and had directed his shot away from us intentionally. That officer was a son of the distinguished surgeon von Langenbeck. Another son was shortly after shot down four times in battle, and he lay for hours, yes, for several days, unrecognized before his father found him.

We had certainly a large number of operations to perform immediately, in the line of amputations and dressing fractures and wounds of all kinds, but we left all resections until a later date. Such a vast and varied experience is

rarely given to any one in so brief a time, and, of course, we availed ourselves of the opportunities as well as we could. We, however, had numerous difficulties to contend with, for we were treating French soldiers who were demoralized by defeat, and, on account of the vast number of patients, they suffered for a time from inadequate nourishment and from an insufficient supply of appliances necessary for all. It was only for a short time, however, that we were thus embarrassed, for soon large extra supplies were forwarded to us. Yet at that time we did not have the advantages of the antiseptic methods of treatment which have since effected such favorable results, and it was quite distressing to see, in spite of all our care, our patients, with wounds and compound fractures, die of blood-poisoning or erysipelas, which spread from one to another.

I said that we left our resections for a later day. I agree with von Langenbeck that we should be very careful how we perform resections as primary operations under such circumstances. Primary resections are not satisfactory, or favorable to life, and I think they are infinitely risky. These late resections then performed were many of them on soldiers who were soon after sent away, and they could not all be followed up, but very satisfactory results were sometimes obtained. There are many reasons why such operations as resections should be performed late, after the primary inflammation has subsided, for, after that time, those cases in which amputation should be performed have been selected out, and, besides, the numerous small pieces of bone which are always found in comminuted fractures about the joints have become separated and have disappeared in the discharges, so that the amount of bone that can be saved may then be determined more accurately. A fracture made by a gunshot wound is almost always a comminuted fracture, and later on you can always ascertain the limitations of the diseased process more accurately than at first. We can, however, here perform partial operations immediately, and I think that recent experience has clearly shown that these partial operations are not only less dangerous than primary resections, but that they are often followed by more satisfactory final results. Later on the periosteum about the fractured bones becomes thickened and tough, and rapidly produces new bony tissue, while in the early period the periosteum over a newly fractured adult bone is especially thin and easily torn, besides which it possesses very little osteogenetic power. For these reasons I think that resections are more wisely performed at a late period.

I do not wish to weary you with a citation of cases, but I do want to give you one or two illustrations, showing you what favorable results may be obtained in this class of operations. Neither would I dwell on the greater risks which attend operations on certain joints, but I will merely state that the wrist, ankle, elbow, and shoulder joints are best fitted for resections, while the knee and hip joints are least fitted for operations of this kind; and I think experience has amply shown that the statement that these joints had better be left alone is one of extreme utility.

Now, I wish to tell you of one case I know of as an illustration of the good results obtainable in these late resections. There was a young officer in the German army in the late

war who was shot through the ankle joint, and there was very extensive shattering of the lower end of the tibia and a large part of the fibula. Von Langenbeck excised the lower three inches of the tibia and the larger portion of the fibula, and the result was that the man not only made a good recovery, but there was no change in the appearance of the joint, and that its function was good is proved by the fact that a few months later he walked all the way up to the top of the famous Monte Rosa, in the Alps, which is no easy task for a man the function of whose limbs has never been impaired. I refer to this case because it is somewhat unique.

Some ten or eleven days after the battle I was speaking of a short time ago, a French chasseur was brought into our hospital who early in the day of the fight had received a wound in the face, but who, nevertheless, had gone on fighting till late in the afternoon, when he was again wounded by a shell which burst and shattered the shoulder and elbow joint on the right side. When I first saw him, ten days later, the shoulder joint was improving, but there was still a large open wound communicating with the elbow joint. I opened the shoulder joint and removed the upper end of the humerus, also numerous pieces of comminuted bone from the shoulder and the elbow joints, and then excised the lower end of the humerus and the upper end of the ulna and radius. After a time the man recovered completely and went home, and so passed out of my observation. But I have heard from him every year since, for he writes me every Christmas telling me of his condition, and I have found that the first result was a necrosis of a considerable portion of the remaining part of the humerus; but later on he said that there was a very complete reproduction of the shaft and some of the upper and lower ends of the humerus. He has been under the constant observation of a skilled surgeon at his home, who has explained to him the onward progress of repair, and he reports to me. He can now perform quite readily all the underhand and rotatory movements with the shoulder and elbow joints, and he can do whatever light work he wishes to. He can saw wood and go through the motions necessary to plane a board, he can use a spade in digging, he has rolled a heavy cask up an inclined plane to get it in his cellar, and he finds that he can use that arm for all the practical purposes of life. The deformity left is so slight that, when his family doctor, at my request, measured the amount of shortening of the arm and sent me the results, he gave me the measurements from the acromial process of the scapula to the external condyle of the humerus, and he described these as if they were in their normal condition and had never been removed, evidently not being aware of the exact nature and extent of my operation. So these portions of bone must have been restored to nearly their former shape. By that operation his arm was preserved to him and is now a useful member.

I think, then, that I have shown you, in the first place, that operations of this kind—namely, resections—had better be performed in the secondary period, that they had better be partial if possible, and that certain joints are more fitted for operations of this character than others.

Now, another thing which I think I have learned, and desire to teach you, is, to avoid probing gunshot wounds altogether, or as far as possible. I have seen great harm come from this practice, and the fact can not be too strongly impressed upon you that the bullet itself is of very little importance in these cases. I know that nearly always the first thing that a patient who has been wounded will ask the surgeon is, "Where is the bullet lodged?" and then he will expect to be relieved by its removal. I think that under these circumstances the surgeon is too often apt to be so inconsiderate as to try to please the patient and accede to his wish. Any one who has had much experience with gunshot wounds knows how easy it is to fail in finding the ball, and how difficult it often is to distinguish by the probe between a piece of lead and an exposed surface of bone, or a piece of fascia or a tendon, and in such cases, if he does not succeed in finding the bullet with the probe, he is very apt to search for it with his finger; then he tries with one forceps and then another to extract it, and in this way septic matter is almost necessarily introduced, so that a wound of a joint which might otherwise have healed perfectly without a particle of suppuration is doomed to suppurate, and possibly the whole limb will in consequence be lost. Besides, experience shows constantly how frequently bullets become lodged in muscles, bones, or some of the viscera, and there become encapsulated and never cause further trouble. The point I wish to insist upon is, that there is infinitely more danger created by the surgeon who attempts to search for and extract a bullet than would result from leaving half a dozen bullets to take care of themselves. In all the pathological museums throughout the world may be seen specimens of bullets lodged in lungs, liver, brain, and bones, where they had remained imbedded for years without impairing the functions of these organs. At the museum in Washington I recently saw a specimen from a man who had received a gunshot wound which had fractured the upper part of the tibia, and the bullet appeared to have lodged just below the cartilaginous surface of the lower end of the femur. The surgeon who had attended him at the time of the injury had thought that there was not a wound of the joint, and so had not operated, but had left it alone. The man lived for years afterward, and after his death this specimen of the bones was brought to the museum at Washington; it was found then that the bullet had caused no injury to the joint at all, and it had not troubled the man for years. I wish by this recital to impress upon you the point that bullets left to themselves are not such dangerous things as they are generally supposed to be. In the recent Turkish and Russian war there was also a strong practical illustration of the value of this let-alone policy. A very distinguished surgeon and a noted professor, both in Berlin and in St. Petersburg, introduced into the hospital the plan of treating all wounds antiseptically, and he had to deal with a great many penetrating wounds of the knee. These he treated by not searching in the tract of the wound with instruments, but he immediately put them up in antiseptic dressings and kept the limb immovable. I quote from memory when I say that nineteen out of twenty-one recovered, not with stiff joints

at all, but with movable joints. If you can trust to the evidence of such a series of cases as that, coupled with what I have heard von Langenbeck say—that he did not believe that a single case of a wound of the knee joint in the whole Franco-German war recovered—you can see clearly what striking advances have been made recently in the treatment of gunshot wounds. Another thing told me by a surgeon of distinction who has had much experience in several wars in the past few years, was that he never interfered with or probed a gunshot wound of the knee, and his published reports show that the results of these fractures in his hands have been infinitely better than those of any other surgeon. This is another illustration of the importance of avoiding all interference with gunshot wounds. Professor Esmarch, of Kiel, whose reputation you all know, preaches from the text, "don't injure" or "don't do damage," and refers to the interference with gunshot wounds; and I think that I have now said something to show you the importance of such a maxim.

Gentlemen, I should like to refer briefly to another question at this point, and that is in regard to the treatment of gunshot wounds of the abdomen. Some months ago Marion Sims, who has honored us by his presence to-day, published in one of the medical journals an interesting series of papers in which he said that these injuries should not be left to themselves; but what he proposed was, that the abdominal cavity should be opened and searched, the bullet be found and extracted, the peritoneal cavity then be cleansed antiseptically and closed, after which treatment it might be possible for recovery to follow where death was otherwise almost inevitable. Now, there is very much in favor of following out this plan, for in these days the abdominal cavity is opened frequently for the removal of diseased organs, and I think that every viscus except the liver has been removed successfully. Portions of the stomach and intestines have been excised, and kidneys, ovaries, the uterus, and tumors of these organs and of the intestines, and, in fact, foreign bodies inside of the intestines, have been removed, and recovery has been the rule; therefore there can be no good reason why such an operation as that suggested should not be performed in these otherwise fatal cases of gunshot wounds. The danger of leaving them alone is, that an extravasation of blood may occur within the peritoneal cavity and set up a fatal inflammation, but yet it is possible for a bullet to become encapsulated even here without doing great harm. The intestines may not be injured although the abdomen is penetrated, for you know that a bullet has frequently passed through the whole abdominal cavity without damaging the intestines at all; yet they may be severed at some point, and it is, therefore, advisable to lay open the abdomen and search for a wound of this viscus, and, if found, sew it up. When I think of the fact that, in a case where the bladder was ruptured in the course of an operation for the removal of an ovarian cyst, the urine poured out into the abdominal cavity, and yet, after washing it out, the patient recovered, I do not think that in a case of gunshot wound of the abdomen we should stand by and fold our hands in despair, but we should give the patient the benefit of the only resource left.

If I were not afraid of tiring you, gentlemen, I should like to give you the evidence of distinguished surgeons showing how successfully antiseptic surgery may be carried out on the battle-field. All surgeons have long been thinking and devising plans of carrying out this method in time of war, and it has been found that certain modifications can be advantageously made, and that certain of the minor details may be omitted. I think we have found that the spray of carbolized vapor may be eliminated, and that we may accomplish the same object by frequently douching the parts with a carbolized solution. Of late there have also been discovered many means by which antiseptic substances can be packed in a very small bulk, and so be easily transported. Though it would be interesting to describe some of these devices, yet they are too numerous for me to even mention at this time. One of the best preparations at our disposal, however, is iodoform, for it is easy of application, its bulk is small, and, for dressing such external wounds as I have spoken of, there must be a very great future before it.

I would like to give you here another illustration of the marked success which is due to the introduction of antiseptic dressings in the treatment of gunshot injuries. You know that only lately England had a war of but brief duration in India, yet in that short space of time there were a considerable number of men wounded, and among these cases there were many of severe injuries of the limbs requiring amputation. An expedition was sent out to the seat of war by the Government, equipped with every improvement in antiseptic surgery that could be devised, and many fractures and amputations were treated on this method. The result was—and again I quote from memory, and can not vouch for the exactness of the figures—but, if I remember rightly, out of one hundred and thirty-six wounded men there was not a single instance of any one suffering from any form of infectious disease whatever; there was no erysipelas and there was no pyæmia. Any one who knows the history of such campaigns in past years, before the antiseptic method was introduced into military surgery, knows that such a result as this is unprecedented.

Gentlemen, after all, What is surgery? Do you say it is the work of a man's hand? Do the surgeons of to-day work with their hands alone? Not so, but with their hands and hearts and brains. Surgery is a battle with Death, in which the surgeon is often vanquished, it is true; but never before have his equipments for the fight been so complete, nor his victories so glorious, as at the present day. We speak of conservative surgery a good deal in these days, but I think that is a bad and useless term. For is not all true surgery conservative? I believe that the word is meaningless, and should be banished from our professional vocabulary.

The surgeon should be a man of judgment, and, in his training, should receive the highest and broadest culture which our schools and colleges afford. The field of instruction is no doubt vast, but, on the other hand, human intelligence seems capable of growing with the requirements for its action. In the future, no doubt, we shall witness new applications of the surgeon's skill, and new methods of deal-

ing with casualties, and the same glorious advances, I feel assured, await the surgeons of the future as have marked the progress of the surgeons of the past. Much has been accomplished by those who have come before you, but presently their duties will fall upon you, and that you may all be fully prepared for the work is my highest wish.

In closing, I wish to thank you much for your courtesy in so attentively listening to what I have had to say on the few points which I have been attempting to impress upon you, and to express my appreciation of the honor done me by your instructors in asking me to speak to you in this place. And now, on the point of returning to my own country, I can say that I go with only the happiest recollections of my visit here, and I may add that I am not vain enough to believe that the kindness and hospitality constantly showered upon me here were at all personal in their intentions, but rather that they are the expression, on the part of the more highly-educated portion of this community, of their love and respect for old mother England, for "the old country," and for "home." During the eight weeks of my almost incessant traveling since I came to this country I have heard but one expression—that of good-will—toward my own people, and I wish now to assure you how cordially this feeling is reciprocated at home, and I hope that this feeling of mutual good-fellowship and good-will may never cease or become weakened.

Original Communications.

DECOMPOSED ANIMAL MATTER IN WATER USED FOR DRINKING AND DOMESTIC PURPOSES

FOR FULLY TWO WEEKS OR LONGER, WITHOUT ANY DELETERIOUS EFFECTS,
BY A GARRISON OF AT LEAST EIGHTY SOULS.

By J. C. MCKEE, M. D.,
SURGEON, U. S. ARMY.

THE water-tank on the cliff at Fort Winfield Scott, located on the "Golden Gate," San Francisco, Cal., which supplies the officers' quarters, soldiers' barracks, Fort Point, etc., is divided into two compartments or divisions, each holding twenty-seven thousand gallons of water, pumped to this elevation by a wind-mill from a spring on the reservation. A waste-pipe of some three inches in diameter carries off the overflow.

For some weeks complaint had been made that the water had a bad odor and a sickening, nauseous taste.

The tank was securely covered by two-inch board planks, with two trap-doors, one over each division, locked by padlocks, so that nothing could be thrown or get in from the top. It was thought and said that the complaints were made by over-fastidious palates, and they were laughed at.

At last the post quartermaster opened one of the trap-doors by wrenching off the rusty padlock, when was found floating on top of the water, in an advanced stage of decomposition, the carcass of a "pole-cat or skunk" (quite a common animal on the reservation).

The mouth of the waste-pipe being unprotected and open, the animal had crawled up and fallen into the water, and, being unable to escape, was drowned. There is no telling how long it had been there; perhaps some months, as fragments of the foul and fœtid carcass were seen floating through the water in all directions.

Prompt measures were taken at once; the water was drained off, the walls of the tank were scrubbed and thoroughly cleansed, and it was then refilled with fresh water.

It certainly is remarkable that water in daily use, saturated and infected with the decomposition of this horribly nauseating animal, did not affect in some marked manner the men, women, and children who had used it steadily for weeks.

I fully expected the development of some filth disease, but no serious results followed. However, to show the effects of the imagination after the discovery, many persons had a sense of goneness, loss of appetite, and suppressed lingering nausea. Without any exaggeration, I must say that the horrid smell and taste lingered around my palate for days and weeks.

This is directly opposed to the theory that diseases may and do originate in animal decomposition and filth. Query: Might not this have been almost too acute and overpowering to have attained a lodgment, when a milder poison would have been more insinuating and permanent?

Diseases and conditions of a typhoid character were expected, but none happened.

THE PATHOLOGY OF ACUTE LOBAR PNEUMONIA

FROM A NEW STANDPOINT.

By WILLIAM D. SCHUYLER, M. D.

Fourth Article.

An Outline Scheme of the Developing Local Process.—The Rationale of the Process.

BECAUSE of the facts and observations just given, I reassert, in conformity to the hypothesis herein promulgated, that the local process is essentially the disease and the cause of the entire phenomena of pneumonia. Furthermore, I now submit the following scheme as embodying the principal steps and events of its formation and removal. It will be seen that these events, of which it is comprised, follow a regular order of development from the initial lesion, and that they sustain to each other the relation of cause and sequence. From which it is fair to infer that the first is in reality the cause of the anatomical process.

The first event in the formation of the local process is the occurrence of a *functional insufficiency* of one or more of the pulmonary capillaries which, although belonging to the pneumonic circulation, form a short segment of the systemic circuit of vessels. Stoppage of the circulating systemic blood immediately occurs through the affected vessels from this insufficiency, and, on account of the continuing influx of blood by the afferent vessels, complete obstruction to its passage is quickly developed. The blocked blood now dams back and naturally seeks collateral channels, which

action causes such a degree of collateral congestion and capillary hyperæmia and distension as results in (a) further functional insufficiency, and (b) the closure of these lateral avenues, by filling, against the further passage of the blood which is blocked and momentarily increasing in amount and pressure. All collateral relief being thereby cut off by the extension of the area of insufficiency and obstruction, the further result of the increasing volume and pressure which continue is now manifest within the direct vessels or those first affected, which consequently and naturally become distended to their utmost capacity. As the effect of this pressure is most felt by the vessels of the involved vascular tract least capable of offering resistance, the capillaries yield first before it. Being very delicate and free to expand, not being confined, these capillaries are quickly filled and distended to that degree that they give way structurally, and the second event to be noted, the *anatomical insufficiency* of the affected capillaries, results.

The third event, *exudation*, now quickly follows as a result of this structural impairment (anatomical capillary insufficiency), and of the continuing morbid pressure of the rapidly augmenting intra-vascular afferent blood, further aided by the respiratory movements—the expansion and contraction of the lungs, and cardiac action. The results of exudation are various and conservative, acting directly to promote a return to healthy, normal conditions. They are extra-vascular, general intra-vascular, and local (pulmonary) vascular. The extra-vascular are the filling and consolidation of the pulmonary structure throughout the area of the organ involved, the creation thereby of an intra-organic (pulmonary) pressure and a resulting enlargement of the organ in the same area, and, lastly, the production of an anæmic state throughout of the consolidated section.

The general intra-vascular effects are depletion of the systemic blood in volume equal to the weight of the exudate, and, second, a re-establishment of an equalized general volume and blood pressure, both of which, as a result of obstruction, had become greatly deranged, while the local vascular effects are resolution of the congestion of the stage of engorgement, with a subsequent complete closure of the affected vessels by lateral compression.

Further general effects of exudation and consolidation are cessation of morbid process and the establishment of rest to the affected, consolidated structures. As a further result of *rest*, resolution actively advances, the consolidate softens; and lateral pressure upon the confined capillaries is therefore lessened, then removed. And at length, by force of the normal, systemic blood pressure which has remained and is being renewed, the capillaries are again opened by the circulating current. The function of respiration is also gradually renewed, and convalescence, which is now well advanced, goes rapidly forward until complete recovery is established.

On account of some morbid disturbance of that normal relation which otherwise, and in health, exists between the blood pressure on the one hand and the tonic resistance of the pulmonary functional, systemic capillaries upon the other, these vessels—which, as must be borne in mind, are but feebly supported anatomically, and whose walls are of

exceedingly delicate structure—one or of more them, or those of a limited area, in a body, prove insufficient to sustain and circulate forward their quota of the passing systemic current of blood, and therefore are compelled to give way and atonically dilate before the pressure to which they are subjected. This insufficiency constitutes, as already set forth, the first step, or event, in the pneumonic process which follows, and so far is functional merely. The causes of this insufficiency of the pulmonary capillaries, so far as it is primarily created, has already been outlined under pathogenesis, and may be briefly referred to here again as *predisposing* and *exciting*. The predisposing condition has been set forth as an asthenia. This may be structural, local or general; or it may exist wholly as an atonic condition of the sympathetic vaso-motor nerves; or, again, as a general neurotic state. Additional predisposing conditions are general vascular fullness, repletion; and, as given, a sensitive, non-resistant, spasmodic cutaneous condition, such as results from some occupations, from functional derangements, in febrile states, and in some chronic maladies, notably in Bright's disease. Examples of nervous atony are met with in cases of acute alcoholism and after extensive traumatism. The *exciting cause* is any influence which determines the systemic blood inward in such volume with force, upon the pulmonary circulation, as is adequate, in their existing condition, to cause insufficiency of the capillaries, one or more, as stated.

The most frequently acting, exciting cause, undoubtedly, is a sudden chilling of the surface of the body, known as the taking of cold. Over-repletion with food, or especially from drink, is a cause. From whatever cause this insufficiency results, to the extent of its development a passive dilatation of the affected vessels immediately occurs. The effect of this passive dilatation of the vessels upon the blood passing through them is its delay; or partial, more or less complete, stoppage. This delay in the discharge of the flowing blood into the efferent vessels, acting in concert with its unchecked arrival by the afferent channels, results in an immediate local capillary filling, and an equal morbid increase of intra-capillary pressure, which further increases the insufficiency. These vessels now become quickly distended from this filling, and this distension on account of their length (the pulmonary capillaries being very short) and their looped form, and also on account of the greater thickness, and therefore resistance, of the vascular walls on either extremity of the capillary section—is, in short, sacculated, and probably aneurysmal in outline and character.

This abrupt sacculated character of the distension, by favoring the formation of eddies in the current within them, and by tending to create knuckles in the looped vessel and suddenly close its lumen, quickly influences a more complete obstruction and its extension to adjoining capillaries. Furthermore, such extension of obstruction is favored by the lateral pressure of these sacculations. On account of the elastic character of the fibrous connective tissue which sustains the pulmonary capillaries, which provides for their free extension in any direction, and because of the close contiguity of the capillaries to each other (the capillary meshes, according to Kolliker, being but 0.002''' to 0.008'' of

of an inch across), lateral pressure competent to be obstructive is not only made upon adjoining capillaries, but also upon the primary efferent vessels, which, being *only* partly filled, and hence not being sustained by a competent intravascular pressure, are readily closed by this lateral pressure of collateral action. However, that obstruction may result from this simply insufficient state, dilatation of a capillary, especially if such is somewhat sacculated, is evident from the well-known condition of circulation through an aneurysmal dilatation or sac, and may be demonstrated by passing a stream of croton, at its existing state of pressure, through an imperfect hose—one insufficient to bear the pressure, which, therefore, will dilate locally whenever a full pressure of water is turned on. In the former instance, in regard to circulation through the aneurysmal sac, we know the current forms eddies and is greatly delayed, and, in the experiment alluded to, the stream of discharge will be seen to stop whenever too great pressure causes dilatations. At any rate, if a more or less perfect obstruction of blood does not result in these vessels directly from and on account of insufficiency, it is quickly developed, as the effect of the additional filling and increased volume and pressure which soon follow from the continuing arrival of the incoming afferent blood. This obstruction to the passage and discharge of the blood into the efferent vessels as rapidly as it is received by the direct course, naturally causes it to well back and seek an exit or passage through collateral channels. By this action, made now more energetic by the pressure of a constitutional organic reaction, manifested by the circulatory apparatus, as shown in the increased cardiac and respiratory movements, collateral channels are sought by the blood and quickly over-distended. These vessels being unequal to the strain put upon them of circulating, in addition to their own quota of fluid, the obstructed blood, momentarily increasing in amount and pressure, in turn give way similarly to those first affected and become insufficient, in which manner the area of insufficiency spreads, and therefore the extension of the process, is brought about. Extension of the pneumonic process through collateral action may be slow or rapid, according to the number of vessels first involved. If but a single capillary, or those of a very limited area are first affected, the degree and effects of collateral action are slight; this is because the volume of obstructed blood is comparatively small, and collateral resources are therefore quite efficient. This explanation may account for those cases of slow development frequently met with. On the other hand, if the capillaries of a considerable area become insufficient at the same moment, the volume of the resulting obstructed blood will be proportionally large, and collateral avenues of escape will therefore be comparatively inefficient; hence the large obstructed volume will at once immediately create a disastrous pressure in collateral vessels, and extension will rapidly result accordingly. Hence is to be explained the slow development of an attack in some cases in which there is an absence of adequate physical signs, although fever may have been present some hours, a day, or longer; and, *per contra*, the surprisingly rapid and extensive developments which frequently occur in other cases.

The anatomical distribution of the pulmonary arteries,

their division and subdivision until they finally break up into capillaries, and their close contiguity, alluded to above, with the frequent anastomoses of the latter, especially in the adult, furnish a rational and scientific basis for the above explanation of the modes of extension set forth; for, owing to the structural arrangement, the immediately collateral vessels are first affected, the capillaries of a terminal artery before those of a collateral artery, and so on. And therefore larger and larger sections, as larger distributing arteries become blocked, are at last concurrently involved. Hence, the larger the area of a created obstruction, the greater and more sudden is the collateral action and its resulting effects.

At any rate, that an obstruction is created is clinically evident from the conditions of the abnormally distributed local blood volume now present, from the anæmic state of the arteries beyond the point of obstruction, and the equally marked hyperæmic condition and overtaxed fullness of the venous, efferent tract before or approximate to it, notwithstanding at this time the organic, circulatory, and respiratory functional forces are exerting their utmost powers to overcome the difficulty, and relieve the disproportion of volume and pressure which has resulted, and persists. The obstruction set up is at first circumscribed, confined to the capillaries which have become insufficient; but as insufficiency is extended in the manner set forth—namely, through an overpowering pressure by the blocked blood in collateral vessels through which it naturally seeks to pass the obstruction causing their insufficiency—so it (the obstruction) increases in extent, until finally its area is equal to the resulting process, the finally developed result. This increase of the area of capillary insufficiency and obstruction, and therefore of the pneumonic process as a whole, as a result, is generally very rapid. All may have been struck by the rapidity with which the complete consolidation, even, of an entire lung has been effected. By the process as described this rapidity is readily accounted for. When we take into consideration the structural delicacy of the capillaries primarily affected in this process, and their singularly unsupported condition anatomically, and thus fully appreciate their incapacity to offer resistance, on the one hand; and when, on the other, we take into account the locality, site of the lesion which has occurred; the vascular distribution which is first strictly collateral and next more distant; the energy which may be developed against an obstructive derangement occurring in the vessels by an excited, exaggerated action of the physiological forces; and, lastly, the character of the intermediary distending body, the blood, for transmitting such energy—we are not surprised that, when a morbid action, especially of an acute obstructive character, is once inaugurated in the pulmonary capillary vessels, it should go forward to a speedy consummation. 1. Of the delicacy of the vessels in which the lesion we are considering occurs, it is needless to say they are capillaries, and have a structure accordingly. Their walls, as described by Gray, “are exceedingly thin,” as they must be for the rapid and adequate performance of their especial function; they lie immediately beneath the delicate pulmonary mucous membrane upon the alveolar walls, and,

with the connective tissue, make up the thin alveoli septæ. In the alveolar structures they form a very close network, the pulmonary “plexus being one of the closest which occurs in the human body” (Kölliker). 2. These vessels, unlike others of their class—the cerebral only approaching them in this respect—are almost entirely without structural support, especially against extreme distension by a morbid action; for which anatomical reason, I may say, this special pathological process is of possible occurrence. Whereas other capillaries run through structures more or less solid, which sustain them when acted on by a too greatly distending intra-vascular pressure, these capillaries are suspended, so to speak, by the least possible amount of elastic connective tissue adequate for the purpose, and are bounded by air-spaces only. It will at once be appreciated that these vessels, being delicate, and not being restrained by direct support, also being unconfined by adjacent structures, and having, on the contrary, every liberty to expand into the surrounding air-spaces, may be readily and easily distended beyond their power to recover unaided when sufficient pressure is made within them.

3. These vessels constitute, as regards the entire circulatory apparatus, its weakest portion. Their place is very properly termed the *locus minoris resistentiæ* of the entire vascular system. This is so not only for the anatomical reasons given above, but because the position is, of all others, most exposed to the concentrated energy of the physiological circulatory forces. They form a short and, as we have seen, weak segment of the concentrated portion of the circulatory system of the great vessels whose walls are of great strength, and through which the blood flows with an aggregated volume and force. As we approach this region, the vessels, considered individually, not only become more powerful, but the circulatory forces become potentially and correspondingly aggregated.

These forces, normally, and at all times, especially when there is a large volume of blood to act upon, are derived from (1) the action of the left heart (not potent when the arterial volume is reduced); (2) capillary action (and in the genesis of this malady I claim that the normal capillary forces are greatly augmented by cutaneous spastic contraction); (3) lateral pressure resulting from muscular contraction; (4) right cardiac action; and (5) respiratory action. Muscular contraction probably does not form an important factor of the developed force in this process, as the cause is not active; but right cardiac action, and the respiratory movements, the former being accelerated while the latter are repeated with especial rapidity and effectiveness, are very potential, and the more so as their action is very near and direct. At any rate, the power which can be developed by these circulatory forces, especially under an excited action throughout, is immeasurably great in comparison to the resistance which can be offered by the pulmonary capillary segment when the circulatory forces become active and the blood becomes aggregated. Lastly, the character of the blood as an intermediary distending body renders it, in a particular sense, an effective agent both for the transmission of the force created and the production of the lesion which results. The characters which render it effective are its

incompressibility, its capacity for free action to regurgitate and make equal pressure in every direction and upon whatever point may restrict it, its hydrostatic capacity for transferring without loss any energy which is communicated to it, its quality of reaction whereby the potentially least resistant portion of its confining vessel is caused to yield first before an adequate pressure, and, lastly, its physiological tendency to circulate through the lungs. Furthermore, this fluid transmits the force imparted to it more potentially on account of venous valvular action, which, when a stress of force is applied laterally, prevents regurgitation and compels each venous streamlet so acted against to move forward directly upon the heart and lungs.

From these sources, and for these reasons, but especially on account of the aggregate sum of energy which may be developed by the physiological forces and transformed into pressure (rendered most effective by the anatomical structure and vascular arrangement), on the one hand, and, at the utmost, the comparatively feeble resistance which can be made by the affected capillaries on the other, functional insufficiency of these vessels and the immediate sequence of such a result, obstruction (first passive, afterward mechanical, due to a blocking of the capillaries), progress and extend very rapidly when once the process of insufficiency is initiated, and until checked by developing forces and counteracting conditions.

While the first result of an obstruction of the blood due to capillary insufficiency (after a passive filling of the atonied vessels has been accomplished) is regurgitation and deflection of the rapidly accumulating blood into lateral channels—into collateral capillaries (rendered easy by the nearness of the capillaries to each other [already given], and their frequent anastomoses), causing the production of a more extended insufficiency and obstruction as set forth—the second result of this pathological condition, accumulative obstruction conjoined with the continuing organic efforts of the system to circulate the blood and thus increasing pressure, is the creation of a further insufficiency—now *anatomical* of the capillaries first affected. This result has been noted in the context as the second essential event in this developing process. It occurs after obstruction from functional insufficiency has become somewhat extended in advance, and, therefore, collateral relief for the obstructed blood has been cut off; when the resulting pressure from the continually incoming, increasing blood, and from the action of the now excited and sthenic circulatory forces conjoined, is *direct* only, and felt most by that portion of the confining vessels least capable of making resistance, which has the weakest walls, namely, in the already affected, distended, and atonic capillaries.

This anatomical insufficiency is such a condition of these vessels as permits the escape from them, under the existing pressure, of such of the constituents of the blood as we shall see form the pneumonic exudation, and is the result of that degree of intra-capillary fullness and stretching from pressure direct and by accumulative blood action as is adequate to form minute stigmata, retiform openings, or endothelial (mural) separations, larger or smaller, through their walls.

That anatomical insufficiency and exudation as its consequence, and the consequence of a continually augmenting blood pressure, do result in this manner, is evident partly from facts already given in regard to the delicacy of the capillary walls (said to be only $\frac{1}{20000}$ of an inch in thickness, and originally to consist of an endothelial-cell envelope), their unsupported anatomical condition, and the relative disproportion of the applied or potential force to the possible resistance these capillaries can offer to prevent such a result. The elastic nature of the capillaries and of the connective tissue which supports them anatomically, and the absence of solid, confining, supporting, and resisting structures about them, favor their easy and extreme distension; their delicacy of structure—extreme thinness—especially favors their structural separation by an adequate intra-vascular and active pressure. ("The capillary wall is elastic, extremely thin, and permeable. By virtue of these qualities, it may allow the passage of a leucocyte or colored globule through its substance without suffering a permanent breach of continuity." Wendt: Satterthwaite's "Manual of Histology," N. Y., 1881, p. 148, gives pertinent evidence upon this point.) And the great disproportion of the distending force, which is applied or brought into action to create this condition, over the possible resistance of the capillaries, makes this result a foregone conclusion.

But, as further illustrating the competency of these dynamo-physical causes to produce an expressed exudate, as set forth, I would refer to the efficient aid afforded by the respiratory movements in producing the necessary pressure to cause the structural lesion required for the result. These movements not only aid in causing exudation, but complete consolidation of the pulmonary structure, which event is, without doubt, principally due to the rapid dilations and contractions of the lungs as they occur in this malady. This effect of the respiratory movements, acting upon and through the obstructed aggregated blood—first causing extreme distension of the helpless capillaries; second, their structural inefficiency; and, third, exudation until the adjacent lung structure is packed to its full distension—may be explained by comparing the result of such movements to the action of a rack and catch, of a bellows, or of a compression pump. It is a forcing action like the last referred to, in which the *vis a tergo* of the afferent current constitutes a valve—preventing regurgitation—when the compression of expiration acts laterally upon the blood, which is received into the lungs with expansion or inspiration. Therefore, with expansion of the lungs the blood rushes in, on account of the suction created, and because it is driven forward by afferent pressure, and completely fills the space created; and when contraction of the lungs immediately follows, this advanced fluid being prevented from regurgitating by the *vis a tergo* of the afferent pressure as set forth, acting as the bellows valve, is driven or forced forward into the distending capillaries until the result claimed—their extreme distension, structural or anatomical, insufficiency, exudation, extravasation—occurs, and consolidation is completed. The respiratory movements, in addition to the sum of the remaining circulatory forces, are

evidently quite competent to force the results as set forth. But, as still further favoring the results of circulatory force to produce the pneumonic exudation, I may refer to two other physiological facts which have a bearing upon the point—one having reference to the blood, and the other to capillary action. Of the latter, that vessels of their class, by their osmotic quality, favor such movements through their walls, and that especially when atonic they readily permit, in degree, both exudations and extravasations. Of the former, by virtue of the motility of all its elements—fluid and solid—it naturally and easily escapes from the capillaries, especially if these vessels are lacking in tone, by diapedesis.

That pressure, favored by the anatomical conditions and physiological potencies set forth, through a created structural insufficiency of the capillaries (also a prior result of obstructive and direct pressure), is the cause of the pneumonic exudation, is further evident from the fact, as we shall see when we come to an analysis of the exudate, that, histologically, it is comprised simply of blood elements; and, lastly, as rendering this last point more conclusive, it is evident from exclusion. The only other possible cause that could result in exudation is an inflammatory action, which I have shown, and, in my opinion, most conclusively so, is not present in this process as an essential cause.

For the reasons given, therefore, I hold it is shown that a direct blood pressure—which remains and increases by augmentation of the efferent blood volume after collateral relief for the accumulating blood is cut off, aided greatly by the forcing and packing action of the greatly accelerated respiratory movements, and rendered possible by the delicacy and anatomical environment of the pulmonary capillaries—is the cause, first, of the structural insufficiency of these vessels, and, second, of exudation.

It is well to remark here that *with exudation begins the conservative action of this pathological process*, which action, when completed, determines the well-recognized cyclical character of acute pneumonia—hitherto not explained. This is most beautifully and clearly shown in the varied results of this far-reaching event, which I now proceed to set forth.

The effects of exudation, which begins to pour forth with the least degree of created anatomical insufficiency, and closely follows in the wake of preceding events, have already been classified as extra-vascular, general intra-vascular, and local intra-vascular.

The most apparent extra-vascular effect is the consolidation of the involved lung structure. This consolidation varies in extent, as we shall see, more or less in every case of the disease; it may amount to the fraction of a lobe, a lobe, an entire lung, or even be of greater extent; portions of both lungs may become involved.

The extent of consolidation in each case depends, first, upon the degree of the predisposing asthenia of the pulmonary capillaries or of the existing vaso-motor asthenia; second, upon the degree of plus blood pressure, and the rapidity of its development and action upon these vessels. The degree and rapidity of the resulting pressure again depend upon the existing volume of the systemic blood,

and also upon the irritative character of the idiopathic organic reaction set up on account of the functional interference created. As governing pressure, I have referred in the context to the fact that pressure and volume, relative to local conditions, are equal; hence where the general volume is great, disturbances may create greater and more disastrous pressure than where it is correspondingly small. Again, where the vital reactions from irritation are considerable and rapid, local disturbances of blood pressure will be more quickly created, and will be more potent to cause more extended results than where reaction is inconsiderable. Hence is explained, in a general way, the more frequent occurrence of a quickly formed and extensive consolidation in young, full-blooded subjects than in the aged or in the depraved, where the circulating volume of systemic blood is lessened.

It must be clearly understood, also, with regard to the mode of consolidation, that it is not the result of a widespread, evenly progressing, general action throughout the area of the lung structure which comes to be involved, but that, on the contrary, it is an aggregated result of many separate consolidations, each of which is complete in itself; and also that, in general, these consolidations are not of strictly contemporaneous formation, but that each one is or may be developed just prior or subsequent to the others about it, excepting where, from an extensive, sudden, and adequate pressure, a large area of capillary vessels becomes insufficient at the same moment, or extension is not developed by an immediate collateral circulation, but by more extended action.

These individual consolidations, coagulations—known pathologically as “pneumonic granules”—result from the coagulation and molding of the exudate as it is received into the extra-capillary and terminal pulmonary air-spaces as it escapes under pressure from the hyperdistended, now anatomically insufficient, vessels.

As the action by which a single terminal space in the lungs—consisting, as it does, of an alveolus, surrounded irregularly with air-cells, and of the entering, ending bronchiole—is filled with the solidifying exudation represents the process of consolidation throughout the area affected, so a study of the effects of exudation in a single space will more clearly set forth the results of a total exudation and its solidification, or the aggregate effects of the unnumbered separate exudations and consolidations which occur in any single process.

Before proceeding with such study, however, it will be well to fix in the mind two facts—first, that the terminal air-spaces mentioned, so far as this exudation is concerned, are practically separate from each other; and, second, that they have a very small holding capacity. Although the alveoli are connected anatomically through the branching bronchioles, yet, as the pneumonic exudate does not extend from one to another through these tubes, but solidifies or coagulates at once, and just within their open mouths, the cavities into which the exudation is poured are to be regarded as distinct from each other.

The capacity of these spaces, even when they are distended to their utmost, is but slight, as we shall see from

their measurements. According to Gray ("Descript. and Surg. Anat."), the terminating bronchial tubes have a diameter of from $\frac{1}{8}$ to $\frac{1}{3}$ of an inch; the alveolus, or intercellular space, is not larger, though less regular, and the air-cells which surround it are only from $\frac{1}{16}$ to $\frac{1}{4}$ of an inch in diameter. The depth of an alveolus is about $\frac{1}{2}$ of an inch. These spaces are larger at the circumference of the lung and in emphysematous lungs, while they are smaller in the more central portions of an organ, and in the lungs of either young or undeveloped subjects. The cube of about $\frac{1}{8}$ of an inch, a very small quantity, will therefore nearly represent the average and distended capacity of a single space, and hence the minute size of a separate coagulum—a "pneumonic granule," as stated—which, as we shall see later, may be readily perceived by the naked eye upon a torn surface of a consolidated lung.

(To be concluded.)

A SINGULAR CASE OF CONGENITAL MISPLACEMENTS IN A DOG.

BY F. S. BILLINGS, VET. SURG.,
BOSTON.

HISTORY.—The patient was a full-bred cocker-spaniel, about three years old. It was brought to me for examination by two of my colleagues, one of whom had had charge of it. This gentleman looked upon the condition as being primarily that of sarcocele, with the secondary development of hydrocele. So far as he could gain any information, the condition had been noticed by the owner some three months. The cause which necessitated calling in professional attendance was difficulty in defecation, accompanied with much pain.

DIAGNOSIS.—A subcutaneous movable tumor on the right side of the rhaps, partially in the perineal region, but mostly to the right of it; probably of a cancerous nature.

STATUS PRÆSENS.—Body well nourished; general health good; right testicle not to be felt. The tumor was oval, about two inches and a half long and one and a half broad; on palpation, one felt a soft, yielding mass, somewhat like dough in consistence, occupying the superior part of the tumefaction. Aside from this, an elongated, somewhat flat and ovoid object could be felt, which could be moved in all directions. This object was looked upon by my colleagues as the missing testicle. At the time of my examination nothing indicating the presence of fluid within the sac of the tumor could be felt; but that the gentlemen were not mistaken in their diagnosis of its presence, *at intervals*, will be shown shortly.

OPERATION.—The operation was very successful, but the patient died. Some would probably be of the opinion, more especially in the veterinary profession, that it is poor policy to chronicle one's errors in diagnosis or surgery; but it is my opinion that the careful study of them is of fully as much benefit to one's self and others as reporting our successes.

Complete anæsthesia was produced by ether. On a sec-

ond and very careful examination we saw no reason for changing our conclusion. A section of the skin being made, we were enabled to examine more critically the contents of the tumefaction. *No fluid escaped from the sac on opening it.* There were no adhesions between the internal wall of the sac and its contents. The dough-like mass was found to be mostly adipose tissue; the hard object was of about the size of a man's testicle, somewhat flattened, with a sort of line of demarcation, or indentation, indicating a medial septum of tissue harder than the remainder of the body, which had a somewhat spongy feel. The surface of this object was quite rough and slightly nodulated. On its postero-inferior surface one could feel a cyst-like appendage, which did not contain any perceptible amount of fluid. One could feel quite a number of apparently ligamentous connections between this object and the body. On further examination of the adipose tissue, one could follow it into a canal which extended into the abdominal cavity, along the course of the rectum. This canal would easily admit the first two fingers of a man's hand for their entire length. The fatty tissue was determined to be an omental hernia. On enucleation of the rest of the contents of the sac, we found the connections to consist of two white, hard cords, a flat, ligamentous-looking body, and several blood-vessels.

The cystoid attachment to the tumor was conjectured to be the bladder, the two white round cords were taken to be the ureters, and, on catheterization, the ligamentous attachment proved to be the urethra, showing our conjecture to be correct as to the presence of the bladder.

The animal having suffered a great deal of pain in defecation during the preceding two weeks, in all probability from a loop of the rectum getting into the canal previously mentioned, and the future life of the patient promising to be burdened with still more suffering, it was thought best to continue the anæsthetic until death was produced.

Further examination revealed the termination of the penis at the angle of the ischium, where it was lost in its muscular adhesions; no part of it extended over the arch into the abdominal cavity. The urethra and two blood-vessels extended in a direct line, posteriorly, to the tumor, which was the hypertrophied prostate gland. The two other vessels connected with the latter, and the ureters, came out through the canal previously mentioned. The missing testicle was found in the external inguinal region, atrophied and buried in adipose tissue.

On opening the abdominal cavity, the right kidney was found to be floating, the vessels being six inches in length; all adipose surroundings were wanting. The other parts were normal. The presence of the bladder in the sac will explain the appearance of water, at times, to my colleagues; but no one seems to have noticed any variation in the external size of the tumor, which must certainly have taken place. The increase of the amount of the omentum within the sac and the continued enlargement of the prostate will explain the gradual increase of the tumefaction in size. The long hair on the parts would sufficiently explain the reason of its not being recognized earlier, or until the difficulty in defecation was noticed,

Clinical Reports.

NEW YORK HOSPITAL.

CLINICAL REMARKS BY ROBERT F. WEIR, M. D.

September 22, 1883.

Gouty Tumor of the Heel.—Traumatic Destructive Synovitis of the Foot; Disease of the Metatarsal Bones; Failure of Excision; Amputation of the Leg.—Necrosis of the Inferior Maxilla; Sequestrotomy.

GENTLEMEN: The patient upon whom I operated ten days ago for removal of a tooth from the left bronchus recovered from the operation without an untoward symptom, and has left the hospital cured. A week ago to-day I operated upon three patients for tight stricture of the urethra, in two instances situated just anterior to the triangular ligament, and in the other in the anterior portion of the urethra, the operation being that of division, so as to allow of the passage of a No. 32 or 34 sound. After the operation, all these patients were given five drops of the tincture of aconite, with an eighth of a grain of morphine, and then three drops of aconite and one sixteenth of a grain of morphine every few hours. In one of the cases—not that of the patient, however, with previous nervous symptoms—two or three violent chills took place, and the temperature ran up to 106° F. That patient had several years ago had divulsion performed, and then had a series of chills, and was for a while quite sick. Having received quinine on that occasion, he requested that it be given in addition to the aconite and morphine in the present instance. It was given, and, whether for that reason or from the element of time, the temperature soon fell. Yesterday all the patients were doing well. The temperature rose above 102° F. for a little while in one of the other cases also. I confess to some skepticism in regard to the efficacy of quinine in controlling the temperature after operations upon the urethra. This view is supported by the observations of Malherbe, a French surgeon. My rule is not to pass the sound after the operation until the slight elevation of temperature which we may expect after almost any incision had entirely passed away, and then to begin with a lower number than that to which the division has been carried—say No. 26—and occupy two or three sittings, one or two days apart, in running from this number up to 32 or 34, as the case may be. No chill followed the passage of the sound yesterday.

The first patient whom I shall operate upon to-day is a physician of middle age, a subject of gout. Two years ago he noticed a swelling over the left heel. This has grown slowly in size, and occasionally a small amount of whitish fluid exudes from it. The rubbing of the shoe causes some irritation. The growth has now reached the size of a walnut, and you observe, upon section, after its excision, that it appears, from its light gray color and grittiness, to be composed of the urate of sodium. All bleeding having been checked, the foot will be dressed with gauze impregnated with a solution of bichloride of mercury, and healing be allowed to take place by granulation.

The second case is that of a man forty years of age, who entered the hospital on the 29th of July, 1883, having four months previously been struck on the foot by a falling stone. Inflammatory action took place, resulting in an abscess with several openings, through which, at the time of his admission, probes could be passed down to softened bone. Most of the trouble seemed to have been along the line of the scaphoid articulation. On rubbing the tarsal bones together, crepitus was elicited, indicating that the cartilaginous surfaces had undergone disorganization. The condition being due to traumatism, it was hoped

that it could be the more effectually treated by excising the dead bone, and for this purpose, on the 6th of August, the patient was placed under an anæsthetic, the sinuses were freely opened, and a large amount of fungous granulations was removed, together with a part of several of the bones of the tarsus, which were the seat of necrosis. Free drainage was established through a large rubber tube. This attempt to save the foot failed, however. Considerable inflammatory action continued, and, while during the past two weeks there has been much less local than general trouble, there has been unpleasant constitutional implication indicated by elevation of temperature, etc., and septicæmia is threatened. The temperature rises every night to between 100° and 101° F.; but there is not much sweating, and no diarrhœa. I shall amputate the leg a little above the middle, making a flap operation, and using the Esmarch bandage, which will be left on until after the completion of the dressing of the stump, as advised and practiced by that surgeon. The dressing, as you see, consists of pieces of sublimate gauze, a roller bandage, a peat pad, and outside of all a rubber bandage. This latter will be kept on for an hour, but the rest of the dressing will be left on for eight days or two weeks, unless there be some indication for its removal. To avoid the change of dressing which a rubber drain demands at the end of a few days, an absorbable bone tube will be used for this purpose.

The third case is one of necrosis of the lower jaw, in a girl twenty years of age, who entered the hospital on the 8th of July of this year, giving the following history: Six months previously she had trouble with her teeth, resulting in pain and swelling about the lower jaw. The teeth were drawn, but the pain and swelling did not abate, but rather increased in severity. Finally an abscess developed, which opened externally and also into the mouth. Through these openings, which were surrounded by dense, brawny, swollen tissue, dead bone could be felt. No special treatment was instituted except to keep the parts clean with disinfectant lotions, but the patient has continued to suffer a great deal of pain; occasionally one of the openings closes, when the swelling increases, and then a fresh discharge of matter takes place. Very small pieces of bone have been observed to come out on two or three occasions. On introducing the probe, the patient not being under the influence of an anæsthetic, I was able to feel dead bone at the angle of the jaw, both on the external and on the internal aspect. In flat bones the dead portion does not separate as soon as in the long bone, and we are therefore often uncertain when to interfere surgically; but in the present case, and at the present stage of the trouble, we feel justified in cutting down and removing any dead bone that may be found. You will observe that, having broken down the involucrum, I have been enabled to remove the portion of dead bone, which consists of the angle of the jaw, being fully an inch long, and involving the entire thickness of the bone. A drainage-tube will be inserted, and a gauze dressing applied, as in the two former cases.

September 29, 1883.

Removal of a Foreign Body from the Pleural Cavity.

GENTLEMEN: The first patient whom I present to you to-day is a man, twenty-eight years of age, who entered one of the medical wards on the 29th of August, more than three weeks ago, suffering from symptoms of pleurisy. The pleural cavity rapidly filled with fluid, and on the seventh of this month aspiration was resorted to. A large amount of nearly clear fluid was withdrawn, but the temperature rose afterward, and the symptoms in general pointed to the formation of pus in the pleural cavity. This supposition was verified by withdrawing a small amount of that fluid with the hypodermic needle. Three days ago a large

trocac and cannula were introduced, and a number of ounces of pus were withdrawn, the carbolic spray playing during the operation. In the case of another patient, upon whom the operation was performed at the same time, the outer tube, which was quite a large one, was allowed to remain in the opening, and the man has since done perfectly well. In the case of this patient, however, as the cannula was imperfect, I inserted a piece of rubber catheter through the tube into the pleural cavity, prior to the withdrawal of the latter, in order to insure perfect drainage, and to avoid the chafing which sometimes takes place from the rigid or sharp end of a metallic tube. In order to guard against the possibility of the suction force of the air entering the pleural cavity drawing the tube within, I had passed a suture through the tube and the skin on either side, thus securing it perfectly, but I was not aware of the fact that the catheter, though never before used, had been for some time in the hospital. Though flexible, it had deteriorated from age in a way that I will shortly explain, and was liable to break, which it afterward did, and entered the pleural cavity. This was discovered the next morning, after fifty-three ounces of pus had drained into the antiseptic dressings used. This weakness in rubber tubing, while common to all vulcanized goods, is oftener met with in the red rubber, for I have been informed that, in order to make catheters smooth and polished, sulphide of antimony is used, and an excess of this element can frequently be recognized in a dusty layer, which in time exerts a deleterious influence upon the rubber, destroying its elastic qualities. This fact should also be remembered in connection with catheterization of the bladder, and a patient, when given a rubber catheter to pass upon himself, should be instructed to always buy two at a time, in order to guard against an accident taking place in the bladder similar to that which has occurred in this man's pleural cavity. I may add that the elastic quality of rubber is better preserved by keeping it immersed more or less in pure water or in weak water of ammonia. Since this accident has occurred, I have learned, in conversation with several of my professional friends, that a similar one has taken place four or five times in their experience, the tubing escaping either directly from the hand of the surgeon into the pleural cavity, or afterward from being imperfectly secured to the thoracic walls. In each instance the foreign body was successfully removed and the patient recovered, and the pleurisy did not seem to have been aggravated by the accident; on the contrary, the cure seemed to be hastened thereby—that is to say, that a free opening was beneficial. In connection with the use of rubber catheters in urinary surgery, I recall the case of a man who once came to me in great distress, more of a mental than of a bodily nature, he having passed, while at Long Branch, a rubber catheter, as he had been in the habit of doing, and, on trying to withdraw it, found that a part remained behind in the posterior portion of the urethra. Retention fortunately was not present, as the urine flowed continuously through the catheter, the outer end of which was just outside the triangular ligament. I withdrew the piece without difficulty, but have since been in the habit of instructing my patients to observe when the catheter begins to swell, which is an indication of its weakening, and to discard it at once. You will observe that, in the case of this patient, the intercostal space is large, and I have been enabled to cut down into the pleural cavity, going through a considerable thickness of tissues, and, failing to find, as I hoped, the catheter in the track of the puncture, I have therefore opened the pleura widely, and have inserted a long bent dressing forceps, and with very little difficulty have seized the piece of tubing and withdrawn it. It is nearly four inches in length. Had the intercostal space been as narrow as in some patients, it would have been necessary to remove a portion of a rib in order to obtain sufficient room to hunt for

the foreign body, and to extract it; in that event, of course, the intercostal artery would be divided, but this, I may say, is an accident which constitutes much less of a bugbear in the surgery of the chest than formerly. Bleeding may be easily checked with the hæmostatic forceps. If you are not fortunate in the first seizure with this instrument, draw up the parts with it *in situ*, and then, probably more easily, you can catch the artery and tie it. The method described by Dr. Abbe, in the "Medical Record" for February 18, 1882, an illustration of which you here see, is also very effectual in controlling the hæmorrhage from this artery, and has been practiced with great satisfaction by other surgeons since. I have now introduced a piece of large and thoroughly tested black rubber tubing through the wound into the pleural cavity, sewed the cut walls closely around it, passed a safety-pin through the tube, and, to make matters doubly sure, secured the safety-pin to the chest-wall by means of two threads and some sticking-plaster. To secure any possible advantage which may pertain to the carbolic-acid spray, two of these have been made to play over the wound during the operation. An antiseptic peat dressing, under which a rubber bag is placed containing sublimated sponges, for the purpose of absorbing the escaping purulent fluid, has also been applied.

October 6, 1883.

Pneumopyothorax.—Thoracentesis.

GENTLEMEN: This patient, a male and an Italian, entered the medical wards of the hospital some days ago, giving a very imperfect history. He had been sick for about twenty days, dating from an exposure to wet. He had chills at irregular intervals, followed by fever and sweating. There was difficulty of breathing, with severe cough and but little expectoration. The liver and the spleen were found enlarged. The patient was transferred to the surgical ward for an operation for pyo-pneumothorax of the left side of the chest, of which there were the usual physical evidences, such as the metallic tinkling, splash of succussion, etc., being present, and the presence of pus was, furthermore, positively determined by the introduction of the hypodermic needle. I shall now cut into the pleural cavity low down, at a point below and back of the axillary space, in order to secure free drainage. As a matter of safety, the carbolic-acid spray will be used, though not with the same security as in the previous case. About forty ounces of pus have been removed. I now introduce a large and strong rubber drainage-tube, made fast by a safety-pin, and apply a thick peat dressing soaked in the bichloride solution, as in the other case. The patient's general condition is low, and what the final result will be can only be determined with time; it must be remembered that there is a possibility of the lung perforation being due to tuberculosis, though the evidence of such is not found.

October 13, 1883.

Opening of the Knee Joint for Supposed Movable Cartilage.—Fatty Tumor of the Shoulder.—Hydrocele Injected with Pure Carbolic Acid.

GENTLEMEN: The case before you is one of inflammation of the knee joint of long standing, occurring in a man twenty-nine years of age, who has had syphilis, although antisyphilitic treatment has had no apparent effect upon the joint affection. The disease began, without any previous injury, two years ago, in the form of a swelling of the left knee, unaccompanied by pain. After a time, however, the patient noticed that once in a while, when walking about, the knee was seized with a feeling as if the ligaments were put upon the stretch, which caused severe pain, notably on the inner side of the joint. He received treatment at the Chambers Street Hospital, where it was recognized that there was considerable fluid in the joint,

and elastic bandages were applied, which caused considerable absorption. When the man presented himself at my clinic at the College of Physicians and Surgeons, a few days ago, there was tenderness about the knee, with considerable general distension of the whole joint, and a marked bulging on the posterior aspect of the limb over the inner hamstring, which evidently contained fluid. It was uncertain whether this swelling communicated with the interior of the joint or not, but, on the whole, the case appeared to be one of so-called hydrarthrosis. After considerable manipulation, there was then discovered at the inner side of the patella a hard movable body, which by pressure slid under the ligamentum patellæ. I told you at that time that such loose cartilages in the knee joint as this appeared to be were due usually to one of three things: First, from inflammatory enlargement of the fringes of the synovial membrane lining the joint. These may either remain attached or float loose after being detached and increase in size. Or, secondly, an injury might possibly have caused a piece of the semilunar cartilage to become detached. Or, thirdly, a blood-clot, the result of an injury, might become so far organized as to act as a foreign body. Of these three commoner causes, the more frequent one is the organization and detachment of synovial fringes. This complication is more likely to occur in the knee joint, but it also sometimes occurs in other joints of the body. Sometimes the detached fringes exist in considerable numbers, especially in cases of rheumatic arthritis. There is no history of injury nor of rheumatism in this case. Whether the pain which sometimes occurs while he is walking about is due to a loose body becoming caught in the joint, I am unable to say, but the suffering he experiences is far less than is usual. Some patients learn, when this accident occurs to them, to set the obstacle free within the joint by forced flexion or extension, after which they can continue their journey. The origin of this body in the present case can not be positively settled until the joint has been cut into, if, indeed, it can be done then.

An incision was made over the supposed cartilage near to the inner side of the patella, but, on opening the joint, the mass that appeared in the wound was not hard nor white but soft, fibrous, and of a brownish hue; it could be drawn nearly an inch out of the joint with a pedicle of increasing thickness. To explore this, which was a novelty to all the surgeons present, the wound was enlarged. The growth (?) could be traced by the finger to run across the joint under the ligamentum patellæ and between the femur and tibia for some distance. The question arose whether this might be a neoplasm, one of the rare fatty tumors found occasionally in joints, or whether it was an abnormally enlarged subligamental fatty tissue. Opinions were divided in the consultation as to the course to be pursued: whether to cut across the joint and to remove the mass, or to tie up the piece already seized and somewhat torn by traction, and to drain the wound after washing it out thoroughly with the sublimate solution. The latter course was decided on, though considerable difficulty was experienced in satisfactorily washing out the pouch over the internal hamstring, which communicated with the joint cavity. The parts were then thoroughly enveloped with an absorbent dressing of wood-wool, and the leg strapped to a Volkmann's splint, enameled to avoid its becoming contaminated by absorption of the discharges.

With regard to the dangers of removal of loose cartilage from the knee joint, before antiseptic methods were employed, out of one hundred and sixty-two cases operated upon there were about twenty-eight deaths. In thirty-two cases in which antiseptic methods were employed not a single death occurred. It must be remembered, however, that this patient has undergone a more severe operation than the simple one of removal of a loose cartilage from the knee; I have seriously invaded the

joint, and the final termination must be more or less doubtful; there will probably at any rate be more or less stiffness of the leg. You will observe that instead of using the spray I have operated in this case under an almost continuous flow of the bichloride solution.

I have been requested by Dr. Markoe, who has been called away, to remove for him a fatty tumor from the shoulder of a woman of about thirty years of age. The tumor is situated just beneath the skin, which it has thrown into more or less distinct dimples, leaving no doubt as to its real nature. You will observe that it has been removed with perfect ease, a drainage-tube inserted, and the wound closed up to the tube with a continued catgut (Kocher's) suture. The tumor is of about half the size of the fist, and is composed of lobules of fat. Such growths do not as a rule return after removal.

The next case is one of simple hydrocele, which has been tapped on several occasions, the fluid reaccumulating after a time. The cause for the condition can not always be determined, especially in the aged; in younger persons it is often due to the irritation of the tunica vaginalis, from a testicle damaged, from gonorrhœa, or from an injury. In this man's case the hydrocele followed a kick upon the scrotum by a horse. The treatment which I first adopted in these cases was the usual one of throwing tincture of iodine into the sac of the tunica vaginalis, having first evacuated it of the hydrocele fluid. I early learned, acting upon the suggestion of my preceptor, Dr. Buck, to augment the amount of inflammation produced by the iodine by rubbing the tissues together for several successive days after making the injection. Statistics, however, showed that in a considerable percentage of the cases thus treated the cure was not permanent. In fifty-four cases collected by Osborne, a recurrence took place in eighteen. After antiseptics came into vogue I operated in about thirty cases, adopting the method of Volkmann, of incising the hydrocele its full length and stitching the tunica vaginalis to the skin, inserting a drainage-tube and partially reclosing the incision. This method was very effective, but the procedure was rather heroic, required an anæsthetic, and confined the patient to bed ten or fifteen days afterward. The method by injecting tincture of iodine had also been often attended by such local and general disturbance that the patient had to remain in the house from three to ten days. I then made use of a twenty-per-cent. solution of carbolic acid, throwing an ounce or two into the tunica vaginalis repeatedly through the cannula after withdrawing the hydrocele fluid; a drainage-tube was inserted through the cannula before the latter was withdrawn, and antiseptic dressing was applied. This treatment caused no pain, and was attended by very good results, but the degree of inflammation was not always sufficient; hence, lately following the example of Levis, of Philadelphia, I have been in the habit of injecting from half a drachm to a drachm and a half of pure carbolic acid, having first emptied the sac of the hydrocele fluid. Scarcely any pain attends the operation; it is very effectual, and the patient is able to attend to his business the next day. I have had an experience of nearly fifty cases treated this way, and in but two has any extra inflammation occurred. No cases of poisoning were met with. There is no doubt about the diagnosis in the present case, the form of the tumor, the fluctuation, and the translucency, all being undoubted evidence of hydrocele. You should remember, when examining the tumor by transmitted light, that the testicle, in accordance with the laws of refraction, appears smaller than it is in fact, and thus avoid puncturing this organ with the trocar. I have thrown about half a drachm of pure carbolic acid into the tunica vaginalis, after having let the water escape through the cannula. This is allowed to remain in the cavity, and no dressing is applied.

THE
NEW YORK MEDICAL JOURNAL,
A Weekly Review of Medicine.

Published by
D. APPLETON & Co.

Edited by
FRANK P. FOSTER, M. D.

NEW YORK, SATURDAY, NOV. 3, 1883.

THE PRELIMINARY EXAMINATION AND THE GRADED COURSE.

DURING the past few years there has been a disposition on the part of our leading medical colleges to a progressive advance in methods of teaching, and it must certainly be acknowledged that a good deal has been accomplished in this direction. Twenty years ago the object aimed at, almost without exception, was to indoctrinate the students with the lecturers' personal views, and, in so far as argument was brought to bear at all, it was rather rhetorical than demonstrative. Now men are taught methods of investigation; they are taught to avoid seizing upon the plausible in theory, and, in fact, to regard all theory, save that which has been proved beyond question, as only a convenient scaffolding to serve a temporary purpose. Consequently, the medical students of the present time are educated in the real sense of the word, and not merely imbued with this or that doctrine.

Under this new state of things, the student soon finds that, except in cases of rare natural aptitude, he needs all the aid that can be drawn from previous drilling in modern methods of study. If he lacks that resource, the chances are decidedly against his taking a creditable stand in his class, and oftentimes against his being able to pass the final examination. It is chiefly on this account, we think, that a preliminary examination is of service. It is a simple test of the candidate's fitness to divert his mental activity into special fields of study. In other words, it is a sort of act of mercy to the student, enabling him, at the expense of some mortification at the outset, to avoid the deeper and more far-reaching disappointment that would be his were he to fail at the last after a long struggle with the odds against him. We are unable to see that the preliminary examination answers any other good purpose. It surely does the college no good, and it certainly does not make its diplomas one whit more valuable. Still, its enforcement is to be commended, and it is to be regretted that colleges that are not endowed can seldom afford to dispense with the patronage which its tendency is to deprive them of.

In regard to the graded course of instruction, there seems to be room for serious doubt if it will finally be conceded to be an advantage. Our impression is that it will be found to be the reverse. If a man has to study anatomy throughout his whole career, in order to achieve excellence as a surgeon; if chemistry and physiology, with all the rapidity of change that marks them, must constantly be called into requisition by the student of pathology; if materia medica and general therapeutics must support special therapeutics at every step—all of which suppositions we take to be indisputable—it is difficult to see what

advantage is to result to the student from laying them aside so soon as he has once been able to pass an examination in them. To be sure, it facilitates the task of winning a diploma, since it divides the forces he has to contend with; but, far from giving him a better outfit with which to follow the practice of medicine, we are convinced that its tendency is quite the contrary. Moreover, we are unable to discern any harm in teaching clinical medicine and surgery to the novice. No one dreams of insisting upon a knowledge of descriptive anatomy before regional anatomy is taken up. In all departments of scientific teaching the acquisition of facts should go hand in hand with their application. It is only in this way that principles can really be elucidated. Besides, no faculty of the mind stands more in need of training than that of observation—it should be trained from the very outset. By all means, let first-year students see all the cases of disease they can. It is better that they should draw erroneous impressions, which they will readily correct as their study advances, than that their opportunities of learning the ease with which error is fallen into should be put off to a period at which their ideas of their own acquirements have become so large that they rebel against confessing to themselves that they can be wrong.

While we regard the graded course as a delusion, however, we believe that those colleges that have adopted it have done so in consequence of a genuine conviction that it was a step in the right direction. We are quite as much convinced, nevertheless, that the three great New York schools, together with the Jefferson College in Philadelphia, will not find in the long run that they have suffered, or that they have sacrificed anything of their pre-eminence, by declining to follow suit.

THE FORM OF THE SKULL IN THE TWO SEXES.

At a recent meeting of the Paris Society of Anthropology, M. Manouvrier summarized his observations on the relative form of the skull in the two sexes. He first sketched the prevailing opinion on the subject, remarking that Gratiolet recognized three cranial types—the frontal, the parietal, and the occipital—according to the relative development of these three cranial vertebræ. That author maintained that in children, as among the Mongolians, the typical form of the cranium was parietal, and that that type persisted through life in the case of women, while in men the type became frontal in the white races as compared with others.

M. Manouvrier has been led to the conclusion, from experimental researches, that a general relation exists between the proportional weight and the form of the brain and of the skull. Contrary to the opinion generally entertained, he has found that the relative weight of the brain is much the greater in the female sex. From a study of several hundred skulls of French men and women, as well as from numerous data published by various authors who have studied the matter from diverse points of view, especially Broca, M. Manouvrier concludes: 1. That the feminine skull is of the frontal type, as compared with the masculine. 2. That the skull of a woman differs from that of a man especially by the lesser development of the parietal re-

gion, the seat of what is known as the motor zone of the brain. 3. That in women the occipital region is much more developed than in men, regard being had to the general cranial development, although relatively less than the frontal region. 4. That the vault of the cranium, as compared with its base, is greater in women than in men. 5. That, in proportion to the cranium, the face is smaller in women than in men.

These conclusions are founded on the following observations: The cubic capacity of the frontal bone, as examined in ninety-four frontals taken from the catacombs, is almost absolutely the same in the two sexes, whereas the total capacity of the cranium is quite different. The coronal angle is greater in women, and so is the frontal portion of the basis cranii, while the temporo-sphenoidal portion is smaller; in other words, the antero-posterior measurement of the frontal compartment of the endocranium is greater in women in proportion to the total size of the skull from before backward. The breadth of the forehead is the same in the two sexes on internal measurement, the external excess in men being due to a difference in the thickness of the bone. In women the cerebral diameters are greater as compared with the facial diameters, with the length of the base of the cranium, and with the vertical diameter, the latter giving only the height of the middle of the vault. The first and second frontal indices of Broca and the fronto-zygomatic index (the proportion between the minimum frontal diameter and the facial bi-zygomatic diameter) are greater in women. The frontal part of the horizontal circumference, as compared with the remainder of that circumference, is the same in the two sexes, the parietal part being relatively greater in men, and the occipital in women. The frontal portion of the antero-posterior cerebral curve, as compared with the rest of that curve, is greater in women, and the frontal auricular angle of Broca is also greater, while the parietal auricular angle is smaller. In women the antero-posterior curve of the cranium and the antero-posterior diameter are greater as compared with the naso-basilar line, which marks the length of the basis cranii.

THE STUDY OF PSYCHIATRY.

THE German Government having lately discussed the question of dropping the subject of the treatment of insanity from the requirements in the State examination, and having, it is reported, decided to omit that test, some of our German contemporaries very properly express regret at the fact. It is pointed out that the connection between a sick person's mental state and his bodily condition is sometimes so close that the physician in attendance would find a knowledge of insanity and its management of great advantage. This is notably the case with puerperal insanity, the victims of which are usually best treated at their homes. Indeed, the home treatment of almost all forms of mental alienation, for a time at least, is scarcely to be avoided, especially in districts remote from an asylum. To dwell upon the desirability of some degree of systematic knowledge of insanity on the part of the general practitioner under such circumstances seems so manifestly a work of supererogation that the wonder is that a government so progressive and so

exacting as that of the German Empire could for a moment have questioned the utility of an examination in psychiatry, much less have come to the decision alluded to.

But, quite apart from these practical considerations, there can be no question that the tendency of the times is to recognize the great advantages that are sure to accrue to medicine from the widest possible range of knowledge possessed by its practitioners of all branches of science bearing even remotely on the art of healing. Moreover, if students are to go through the farce of studying psychiatry, or listening to lectures on the subject, with the blissful certainty that they are not to be examined in it as one of the requisites to admission to practice, the bad effect will not be confined to them—it will extend to the alienists themselves, who, being no longer adequately brought before the general profession, will either become lukewarm in the pursuit of their specialty, or else cultivate only those of its aspects that may be made to serve as stepping-stones in physiological study. It is strange that what many of the most thoughtful are striving for in this country should be cast aside in Germany.

THE REGULATION OF MEDICAL PRACTICE AND THE PLEA OF PERSECUTION.

AN individual who styles himself a "magnetic physician" has lately been writing letters from Boston to the newspapers, in which he waxes fierce in denunciation of the New York law regulating medical practice. We have received proof-slips of two of these letters, written to the "Banner of Light" and to the "Saratoga Sentinel," for which favor we presume we are indebted to the author. Stripped of their wordy ferocity and their inconsequential attempts at argument, the letters in question assume that the law in force in this State, together with laws of the same general purport elsewhere, is a device on the part of non-sectarian physicians to oppress the medical sects.

Every quack in the land is crafty enough to see that this specious plea is almost the only one likely to touch the popular heart, and that, aside from downright "influence," it is all that can be relied on to bring about a repeal of the laws already in existence, or to prevent the enactment of like laws in States that now have none, relating to the practice of medicine. And there is great danger that this plea will prevail. Of course, it is utterly unfounded, as any one may assure himself by a perusal of the statutes in question. There is no law in force in this country that discriminates against any sort of medical practice, and there never will be. The legislation thus far obtained by the medical profession requires only proper guarantees that practitioners of medicine are persons who can show evidence of having received a fair medical education; it does not concern itself with their peculiar theories or modes of practice.

Of course, all this is well known to our readers, but it is not known to the general public, and there is no little danger, consequently, that a sympathetic clamor will be raised that will have its effect on legislators. Were the facts of the case known to the people, the scoundrels who trade on the love of fair play that prevails everywhere among us would find their occupation gone. We trust, therefore, that our readers will

omit no opportunity to present the matter in its true light, each before his own circle of acquaintances, to the end that no senseless clamor may prevail against the uniformity of legislation that there seems to be some hope of securing as a means of making the profession as a whole what it should be, and of protecting the community against the predatory incursions of traveling mountebanks.

THE NOTIFICATION OF INFECTIOUS DISEASES.

THERE is great reason to fear that the risks run by the community in consequence of the failure by physicians to report cases of infectious disease to the proper sanitary officers are not appreciated by many members of the profession. It is not alone that the value of our statistics is vitiated by reason of their being founded on incomplete returns—a consideration ample of itself to impel every conscientious practitioner to do his duty in this matter; but, in addition, it needs no elaborate reasoning to show that outbreaks of infectious disease often grow to dimensions that make them practically unmanageable, which, if carefully reported in their beginnings, might readily have been brought under control.

Our own Board of Health has never failed to urge this matter with due energy upon the attention of the profession, although it has judiciously refrained from pushing the punitive provisions of the laws under which it acts. In proportion as it has been discreet should its appeals be heeded. Our attention is called to the subject anew by the practical way in which its bearings are put in the last Annual Report of the Connecticut State Board of Health, a volume alike creditable to the board and to the State. It is pointed out that the closure of schools might often be avoided by measures looking to individual isolation, with the double advantage of shielding the pupils against infection from their fellows and of keeping them away from other sources of infection during the hours devoted to study.

Some years ago, when boards of health were a novelty in this country, they may have shown a disposition to create unpleasantness in families afflicted with infectious diseases, but we are quite sure that that mode of behavior is a thing of the past, and that no physician now need hesitate to report a case under the apprehension that the patient or his friends will find the consequences disagreeable.

MINOR PARAGRAPHS.

THE HERO OF FIELD HOSPITALS.

THE man in whom, while still but an assistant surgeon, Surgeon-General Hammond had the discernment to see the qualities to fit him for the exacting and responsible position of Medical Director of the Army of the Potomac is not likely to pass from the memory of those who took any part in the work of maintaining the organization of that army, or who were in a position to realize the perfection to which its organization was carried. But it is now verging on a score of years since that army was disbanded, and the number of persons to whom Surgeon Jonathan Letterman's achievements are personally known is getting to be limited. By preparing a memoir of Dr. Letterman, therefore, Surgeon Bennett A. Clements, of the army, has

performed a service to the community, every member of which has a personal interest in the matter of army organization in case of another outbreak of war, as well as a graceful act in commemoration of a deceased fellow-officer. We refer to his paper published in the September number of the "Journal of the Military Service Institution," a copy of which, in the form of a handsome pamphlet, issued by Messrs. G. P. Putnam's Sons, we have taken great interest in reading.

EVOLUTION AND THE TREATMENT OF WOUNDS.

WE have been much interested in a *brochure** lately brought out by one of our occasional contributors, Dr. C. Pitfield Mitchell, in which he treats of the connection of the doctrine of evolution with the management of wounds. The work is scholarly and thoughtful, being in part an elaboration of the author's article, entitled "An Evolution Aspect of the Healing of Wounds," published in this journal rather more than a year ago. A thorough advocate of the doctrine of evolution, especially as expounded by Mr. Herbert Spencer, Dr. Mitchell yet avoids the temptation to fit facts to the law, but contents himself with tracing their points of contact. We commend the essay to our readers' attention.

THE "MEDICAL STUDENT."

This is the title of a new monthly journal, published in New York. The size of its page is about that of this journal. The first number, dated October, 1883, contains twelve pages of reading matter. The typographical appearance is creditable, and the first issue is embellished with a particularly good portrait of Professor William Darling. If medical students are really in need of an "organ"—and such seems to be the idea of Mr. William G. Mortimer, who is both the editor and the publisher—they are to be congratulated on having found one of such handsome appearance, and one that gives promise of containing much matter of interest not only to under-graduates, but also to practitioners.

THE NEW YORK INFANT ASYLUM.

ON complaint of the asylum, and on the affidavits of Dr. Frederick M. Warner, Dr. Edward Bradley, Dr. George B. Fowler, and Dr. A. N. Bell, Judge Donohue has enjoined the Board of Health of the Town of East Chester from all further interference in the concerns of the asylum. This scarcely improves the status of the institution before the public or the profession. Last week we published a letter from Dr. William M. Polk, in which he stated that he had never had any official connection with the asylum, and now Dr. Paul F. Mundé asks us to announce that he has resigned from it.

LIABILITY FOR DOCTORS' BILLS.

A CORRESPONDENT of the "Maryland Medical Journal" says: "Dr. Samuel H. Gump was sent for by Mrs. Harry Fisher to attend her nurse, who was sick at their place in the country. The nurse failing to pay the bill for professional services rendered, the doctor sent it to Mr. Fisher, who refused to pay it. Thereupon the doctor brought suit against Mr. Fisher, and the case was tried before Judge Duffy, of the Baltimore City Court, on October 20, 1883. The judge decided that Mr. Fisher was responsible for the payment for medical services rendered the nurse employed by him, the doctor having been sent for by Mrs.

* "The Treatment of Wounds as based on Evolutionary Laws." By C. Pitfield Mitchell, M. R. C. S., etc. New York: J. H. Vail & Co., 1883.

Fisher, and that she had the right to make her husband responsible for such services, and that, having sent for the physician herself, her husband was fully responsible. Judgment was given the plaintiff for the amount of the bill and costs."

NEWS ITEMS.

INFECTIOUS DISEASES IN NEW YORK.—We are indebted to the Sanitary Bureau of the Health Department for the following statement of cases and deaths reported during the two weeks ending October 30, 1883:

DISEASES.	Week ending Oct. 23.		Week ending Oct. 30.	
	Cases.	Deaths.	Cases.	Deaths.
Typhus.....	0	0	1	0
Typhoid fever.....	59	20	61	22
Scarlet fever.....	45	12	55	9
Cerebro-spinal meningitis....	1	1	6	5
Measles.....	13	2	29	7
Diphtheria.....	38	20	43	28

YELLOW FEVER.—A Pacific mail steamship arrived at San Francisco Wednesday morning, with three of her company suffering from yellow fever.

THE CHOLERA IN THE EAST.—A recrudescence of the epidemic has broken out in Alexandria, causing from five to ten deaths daily, and the disease is reported to have appeared at Mecca.

SMALL-POX.—One of the Cunard passenger steamships reached this port on Wednesday, having a patient with small-pox on board. The affected person was isolated after it was known that he had the disease, and the vessel was allowed to come up to her berth after a short detention at the quarantine station, where she was fumigated.

THE LATE DR. BEVERLEY LIVINGSTON.—At a stated meeting of the New York Pathological Society, held October 24, 1883, the following tribute to the memory of the late Dr. Beverley Livingston was unanimously adopted:

The decease of our late colleague, Dr. Beverley Livingston, brings to the Pathological Society an uncommon sorrow. When, in the fullness of years, one of our number is called from our midst, the knowledge that separation must come at last and the pleasurable recollection of completed labor reconcile us to our loss. But when we are deprived of the counsel of one who gave such promise of useful and invaluable aid, before whom there seemed to be a long and honorable career and an almost achieved reputation, our sorrow is deep indeed.

Dr. Beverley Livingston was distinguished by an earnest zeal, indefatigable industry, by love and devotion to his profession. While he gathered in the pursuit of practice some of the fruits which the latter yields, he gave an ample return by aiding, as an active co-worker with us, the advancement of science. Though his career was incomplete, the lesson of his life is none the less perfect. To have won the respect and esteem of his colleagues, to have been honored in the full discharge of his duties as a man and physician, is the reward which the memory of our late associate proudly and justly claims.

The New York Pathological Society presents this tribute to the worthy family of the deceased, in the hope that in it they may find a better consolation than in words of sympathy.

Signed H. N. HEINEMAN, }
F. FERGUSON, } Committee.
E. L. PARTRIDGE, }

THE AMBULANCE SERVICE is to be improved, it is stated, by the establishment of facilities for signaling at the Elevated Railroad stations.

AN EXPULSION FROM THE NEW HAVEN COUNTY MEDICAL SOCIETY.—At the recent semi-annual meeting, Dr. Francis Bacon moved the following resolutions, which were unanimously adopted:

Whereas, E. L. R. Thomson, a member of this society, is accused of the offense of criminally procuring an abortion, and was prosecuted therefor in the City Court, and, making no defense, was held in bond of \$1,000 for trial in the Superior Court, which bond he has since forfeited rather than to appear for trial at the appointed time, hoping thus to escape further punishment, and thereby making virtual confession of the justice of the accusation; therefore, be it

Resolved, That he, the said E. L. R. Thomson, be, and hereby is expelled from this society.

Resolved, That this society, viewing with deep concern the prevalence of the execrable crime of foeticide, a crime which strikes at the very roots of society, a crime equally shameful, demoralizing, and fraught with infinite dangers to the woman upon whom it is practiced, has seen with indignant regret the latest exhibition of futility in the administration of laws against this crime.

Resolved, That, in the opinion of this society, the conviction and adequate punishment at law of a conspicuous abortionist would have a stimulating and salutary effect upon the public conscience, now dulled and benumbed by the sight of statutes condemned as a dead letter by the impunity of habitual malefactors.

THE COST OF PUBLIC CHARITY AND CORRECTION.—The Commissioners of Public Charities and Correction estimate that \$1,711,377.50 will be required to maintain the institutions under their care during the coming year.

THE NEW PHARMACOPEIA.—The publishers, Messrs. William Wood & Co., announce that any person having purchased a copy of the United States Pharmacopœia of 1880, and desiring a list of the corrections made since its publication, can procure the same by sending a two-cent stamp to them.

THE VETERINARY MEDICAL SOCIETY OF THE STATE OF NEW YORK was organized last week.

THE PARIS FACULTY OF MEDICINE.—M. Jaccoud, formerly professor of pathology, has been transferred to the chair of clinical medicine, succeeding the late M. Lasègue. Candidates for the vacant chair of pathology were to be allowed until October 26th to present their claims.

CONVICTION OF AN ABORTIONIST.—Mrs. Furlong, the Brooklyn abortionist, has been convicted on a charge of criminal abortion. An outline of the facts in the case was given in the journal several weeks ago.

OBITUARY NOTES.

JOHN FRANCIS GIGNOUX, M. D.—Dr. Gignoux died on Friday of last week, in the forty-first year of his age. The deceased was of French parentage, but we think he was born in this country. At all events, the greater part of his life was spent in New York and its immediate neighborhood, although he received his academic education in Maryland. He graduated in medicine from the College of Physicians and Surgeons, in the class of 1864. Before receiving his diploma, he served creditably in the United States Sanitary Commission, and after his graduation he spent two years as a member of the house staff of the New York Hospital. After completing his term at the hospital, he practiced medicine for several short periods in New York and in Monroe, Orange County, his professional career being interrupted a number of times by his embarking in business undertakings of various kinds. When seized with his last illness, he was in practice in this city.

Dr. Gignoux was a man of powerful build, and his death at the comparatively early age of forty is a surprise to those who have often admired his physique. His bodily vigor was fully

equaled by his mental capacity, and his qualities of heart were such as to endear him to all who knew him.

ALBA E. KEMP, M.D., of EAST DOUGLAS, MASS., died suddenly on Monday, the 29th inst., at the age of sixty-one. He was a member of the Massachusetts Medical Society, and was held in high esteem both as a physician and as a citizen. His death was due to disease of the heart.

DYER LOOMIS, M.D., of NEW BERLIN, N. Y., died recently, at the age of eighty-three. He was born in Ashfield, Mass., graduated in medicine in 1827, and practiced his profession in his adopted town for over half a century. He was a member of the Medical Society of the State of New York and of the Medical Society of the County of Chenango.

JOHN J. ZITZER, M.D., of BALTIMORE.—Dr. Zitzer, formerly surgeon-general of the Hungarian army, and surgeon-general of the State of Pennsylvania during the late civil war, died in Baltimore on Tuesday of this week. He was prominent as a politician.

Letters to the Editor.

THE EFFECT OF AMYL NITRITE ON THE CIRCULATION IN HIGH ALTITUDES.

To the Editor of the New York Medical Journal:

SIR: A patient of mine, who had been provided with this drug for her own use in aural vertigo, recently took a trip up the Oroyawad to Chila, which is twelve thousand two hundred and twenty-five feet above the sea. Learning that people who make this ascent sometimes suffer very much from vertigo and other head symptoms, in consequence of inhaling the highly rarefied air found at such a height, she carried the medicine along, with the intention of resorting to its use if necessary. The trouble caused by ascending to the high altitude of Chila is known among the Peruvians as *soroche*.

My correspondent, writing from Callao, Peru, says: "Before leaving the ship I put the two little bottles of amyl which you gave me in my bag, and made the following observations from their use on certain members of the party who were affected: . . . When we were about two thirds of the way up, one of the gentlemen got out to pick some flowers. After walking rather rapidly, he came back with his whole face, especially the lips and nostrils, of a deep purple color; and, in describing his feelings, he said that he was very dizzy, and that his head ached. The inhalation of the amyl relieved him almost immediately, and, although we continued the ascent, his face resumed its natural color; any exercise after this, however, brought the trouble on again, and he was obliged to resort to the medicine frequently until we were well down again on the return journey. On our arrival at Chila we had breakfast, and, inasmuch as none of us had any nausea, we were told that we were not very badly off; yet we all performed our movements while there very slowly. I felt as if all the blood in my body was trying to get into my head, and water ran from my nose. My own distress was not relieved by the amyl; but still I was able to get about. Just after beginning our descent, one of the ladies was taken with dizziness, and became deathly pale. The amyl relieved her at once, and she was obliged to use it but twice. The pulses of the party, when on the summit, were observed to range from 92 to 128. One gentleman, who became dizzy at the station at Chila, was relieved by a glass of Italia, which is a kind of brandy made on this coast from the Muscatel grape."

Although these observations may not be regarded with the

same interest as if coming from a professional writer, and may not possess the value of repeated experiments in this use of the drug, yet they seem to be suggestive of an important fact, namely, that the heart's action may thus be sustained, under the circumstances related, more promptly than by the use of alcoholic or other diffusible stimulants. Thinking that the attention of those who have opportunities to give this drug a trial for the trouble mentioned by my correspondent may be drawn to the subject by this quotation from her letter, I beg to ask a place for this communication in the columns of your journal.

SAMUEL SEXTON.

THE NEW YORK INFANT ASYLUM.

MT. VERNON, October 24, 1833.

To the Editor of the New York Medical Journal:

SIR: Will you allow me to make a correction to your editorial comments on the New York Infant Asylum troubles? It was not the East Chester Board of Health, but a coroner's jury who condemned the management of the Infant Asylum, and recommended the district attorney to take the matter in hand. And this action was not taken, as you intimate, because of the death-rate, but because of the evidence of "*gross negligence on the part of those having charge of the medical and sanitary departments, and the lack of attention of the president of the society acting under the authority of the Board of Managers.*" And allow me to add that the absurdity of the affair centers in Mr. Bell's action in procuring an injunction against the East Chester Board of Health, when this board was simply taking measures to guard the village against contagion from the Asylum. The coroner is still at work with another jury, investigating other abuses said to exist at the Asylum. And the quarantine which should be established to protect this village is postponed until the courts decide if the Board of Health can protect the community who elected them for this specific purpose.

E. F. BRUSH.

A TEMPTING PROPOSITION FROM A LIFE INSURANCE COMPANY.

To the Editor of the New York Medical Journal:

SIR: The many malcontents who continually do cry about the insufficient remuneration of professional services will rejoice at the glad tidings that finally light glimmers at the end of the long and wearying road of medical study. I have before me an alluring multiplicate document from a prominent life insurance company in Boston, intimating that, if I be "thoroughly acquainted with the methods of physical exploration," and can induce two of my professional brethren to vouch for my moral character and scientific attainments, I may aspire to act as an examiner in the district wherein I live, the fee for each examination being fixed at the munificent sum of *twenty-five cents*. In addition to this positive pecuniary proposal, I am offered the prospective advantage of a possible increase in my private practice through the new acquaintances which I may make among the able-bodied applicants for life assurance, who might, perhaps, learning the amount of my official emoluments, be willing to employ me at the same rate.

Circumstances beyond my control debar me from availing myself of this tempting offer, under which, if business were very brisk, I might earn as much as two dollars a month; but the fraternal sentiment which notoriously actuates all of us in the State of New York impels me to make public the opening which awaits a favored few of those who, having mastered the science and art of medicine, have yet been unable to obtain situations as journeymen mechanics or elevated-railway gate-men. Any such may hear of something to their advantage by

addressing—with proper recommendations from their last places—the John Hancock Mutual Life Insurance Company, of Boston, Mass.

A. L. C.

NEW BRIGHTON, N. Y., October 30, 1883.

Proceedings of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

A STATED meeting was held October 10, 1883, Dr. G. F. SHRADY, President, in the chair.

DISEASE AT THE KNEE-JOINT.—Dr. WACKENHEIMER presented the upper part of the tibia and fibula, the seat of disease, for which he had performed amputation recently. The patient was fifty-two years of age, and about two months before the operation had noticed some swelling of the knee. There was but little pain throughout the course of the disease. During the last three weeks the swelling increased rapidly. The condition found after amputation seemed to be that of recent hæmatoma occurring after rarefaction of the bony structure of the head of the tibia and fibula. No pus was present. There had been no history of injury, and the patient was able to walk until the time of the operation.

The PRESIDENT referred to the points in diagnosis between these cases and the arthropathies of locomotor ataxia, and stated that he had recently seen two cases of the latter in which the histories dated back two years, and in which pain was almost entirely absent. One of the patients could walk about with perfect ease, except that the joint was not steady.

STRANGULATED INGUINAL HERNIA.—Dr. ELLIOT presented a specimen, giving the following history: On the 19th of July a young man, nineteen years of age, was brought to the hospital, having been seized with the symptoms of strangulated hernia two days before. Attempts at reduction by taxis had been made without success. During the last twenty-four hours there had been stercoraceous vomiting; the patient was unconscious, and did not rally after the operation. The strangulated parts were not gangrenous, but were not returned. The points of interest in the case were: The descent of a congenital hernia with strangulation for the first time at the age of eighteen years, the result of the case with almost complete absence of general peritonitis, the comparatively good condition of the parts, and the possibility of recovery had the tumor been reduced.

Dr. CARPENTER had once operated in a case of strangulated hernia of five or more days' standing. The condition of the gut so closely resembled gangrene that it was questioned whether it should be returned into the abdominal cavity. This was done, however, but the patient never rallied from the operation. An interesting fact in the case was that the physician who first saw the patient took the case to be one of indirect inguinal hernia, and attempted reduction by way of the inguinal canal. It being really a case of direct inguinal hernia, his efforts had simply resulted in increasing the size of the tumor.

Dr. PETERS reported progress from the committee appointed to investigate the subject of SCARLET FEVER IN HORSES. The report gave the result of experiments made by Dr. Sickler upon the inoculation of scarlatinal poison, both in horses and in man. One calf also was inoculated. Blood from a child suffering from scarlatina was introduced into the circulation of the animal. The symptoms produced were more or less uniformly those of redness of the pharyngeal mucous membrane, swelling of the glands of the neck, rise of temperature and pulse rate, running from the nose, eruption, and restlessness. Seven chil-

dren, who had been exposed to scarlatina, were inoculated either by injection of blood or of the scales of scarlatinal eruption, or by inhalation of the exhalations of a patient suffering from the disease. In all but one case symptoms of the disease followed soon after the inoculation; in that case several days passed before the child showed signs of the disease. The attacks were light. In but two did albuminuria develop. The patients recovered. Dr. Peters remarked that, although the veterinary surgeons of New York did not usually recognize that scarlet fever existed among horses, it was described in books on veterinary surgery, and, with diphtheria, had been traced back to the earliest periods at which these diseases had been recognized in man, if not earlier. He regarded a certain form of "pink-eye," but in which the eye is not likely really to become of a pink color, as scarlet fever; swelling of the glands of the neck, discharge from the nostrils, and albuminuria were much more likely to be present. The danger of men carrying the germs of the disease home from the stables to their children ought to be borne in mind in any case of doubtful origin.

CEREBRAL SOFTENING.—Dr. FERGUSON presented the brain of a patient, a woman sixty-five years of age, who died in the New York Hospital that day. A short time before, she scalded herself to the first and second degrees over the chest, arms, and legs with boiling water. It was stated that she had never been sick before. On admission there was paralysis of both sensation and motion on the left side of the body; the tongue deviated to the left, speech was thick and incoherent, but questions were answered intelligently. The mental condition, however, grew worse; the breathing became stertorous, and the pulse, respiration, and temperature rose. At the autopsy the legs and ankles were found slightly œdematous; hypertrophy of the left ventricular walls with moderate dilatation existed; the kidneys were small, the surface granular, the cortex atrophied, numerous hyaline, granular, and fatty casts being present in the tubules. There was extensive softening in the right hemisphere of the brain, especially in the parietal region. The ventricles were dilated. In some places, centrally, the cerebral structure was almost completely disorganized. The left hemisphere was not affected. There was no evidence of embolism, thrombosis, or hæmorrhage, unless to a very limited degree. The interest in the case related to the suddenness of the cerebral symptoms, and to the extensive softening without apparent cause. A more careful microscopical examination would be made after hardening of the tissues. It was also of interest to note the extent of the kidney lesions, the numerous casts in the tubules, with absence of signs of renal disease, upon careful examination of the urine.

Dr. BIRDSALL said that, of the three possible causes of the cerebral lesion—embolism, thrombosis, and hæmorrhage—he thought the latter was the most probable, inasmuch as there seemed to be some evidence of slight hæmorrhage in the ganglia.

A STATED meeting was held October 24, 1883, Dr. G. F. SHRADY, President, in the chair.

SARCOMA OF THE CHOROID AND VITREOUS BODY.—Dr. HEITZMANN presented a specimen from a man sixty years of age in whom the eye was enucleated for sarcoma. The disease afterward manifesting itself in the liver and elsewhere, the patient had died. The usual signs of the melanoid variety of malignant tumor were present. Dr. Heitzmann considered the case specially interesting, as going to prove the view which he almost alone sustained, that the vitreous body was living and organized, the evidence of which in this case was its distinct separation from the choroid tumor by a fibrous capsule, the disease having, therefore, affected the vitreous independently, and not by cell migration.

Dr. JACOBI thought that the question raised was an important one, and that before accepting this case in evidence it would be interesting to know as to the possibility of secondary affection by way of the lymphatics entering the eye anteriorly.

EXTIRPATION OF THE KIDNEY.—Dr. WYLIE presented a specimen and gave the history of the case. [Dr. Wylie's account of the case will be embodied in a paper to be published in a future number of the journal.]

Dr. HOWE thought the presence of the tubercles might be considered sufficient cause for the pain which the patient had suffered, without appealing to possible strangulation.

Dr. JACOBI thought the impression should not be allowed to go forth that movable or floating kidney was in itself sufficient reason for extirpation of that organ; if so, a great many women would have to be deprived of their renal organs. He could recall at least thirty cases of floating kidney—mostly in women, some in children, fewer in men—and in not one had there been any indication for nephrectomy. They should be told to wear a bandage, and, if they were slightly discomforted thereby, it was better to bear the discomfort than to have but one kidney.

Dr. WYLIE doubted whether much would be gained by wearing a bandage; he was inclined to think that a tight bandage in the form of a corset, although worn higher up, was sometimes a cause of the condition. Floating kidney in itself without symptoms certainly did not justify nephrectomy.

Dr. HEINEMAN said that as many as half a dozen cases of floating kidney were seen at Professor Clark's clinic nearly every winter, mostly in women. It was true, as suggested, that the pus in the urine at present in Dr. Wylie's case might come from the ligated ureter, but it was not improbable that it came from the other kidney, for usually tuberculosis affected both of these organs at the same time.

STRANGULATED HERNIA.—Dr. HOWE presented a specimen, removed from a man, forty-five years of age, who said that he had had a hernia for thirty years, but that it had never before given him any trouble. October 19th, while dressing meat—his occupation being that of a butcher—he felt sudden pain in the groin; the swelling grew red, and the pain continued. He vomited three or four times daily, and had not had a passage since the attack. He entered the hospital October 23d, when he was suffering great pain and was in a condition of partial collapse. The oblique hernial swelling had been poulticed. Three or four inches of gangrenous intestine were removed, and the ends stitched to the edges of the sac. The patient would doubtless die. The case was one illustrating the sad results of neglect. Evidently no attempts had been made at taxis.

Dr. WYLIE stated that he had seen a case in the country in which the physician had refused to operate for strangulated hernia because, as he said, the day was too cold. An artificial anus formed, and the patient was still confined most of the time to the bed, about a year after the accident. He asked Dr. Howe if the opening should be closed.

Dr. HOWE replied that it should not; that, if it were not large enough, it should be made larger.

STENOSIS OF THE PULMONARY ORIFICE OF THE HEART.—Dr. VAN SANTVOORD presented the heart of a child which died at the age of twenty days at the Randall's Island Foundling Asylum. On admission, it was well developed; the respiration and pulse were rapid; there was a loud murmur over the whole of the chest, most distinct to the left of the sternum at its junction with the third and fourth ribs. The child was not cyanotic, but cyanosis developed, and it apparently died of cardiac failure. At the autopsy the semilunar valves of the pulmonary artery were found much thickened and shortened, causing marked stenosis. It had also been stated that the tricuspid valve was affected. But this was not evident from the speci-

men in its present condition. There was marked hypertrophy of the right ventricle, the ductus arteriosus was widely open, the inter-ventricular septum perfect. There was no atelectasis.

RUPTURE OF THE HEART.—Dr. FERGUSON presented two hearts the seat of rupture. The first specimen was from a man about fifty years of age. He had suffered from an attack of dyspnoea, and about two hours afterward, having gone to the water-closet, was found dead. At the autopsy the body was found well nourished, and there was no œdema. The kidneys were markedly atrophied, giving the usual signs of diffuse nephritis. The lungs were congested and œdematous. The pericardium was distended with pure blood. The heart was normal in size; the walls were the seat of degeneration; the left ventricle was ruptured near its apex a distance of three quarters of an inch.

The second case was that of a man, forty-four years of age, who in September last sustained an injury on the dorsal aspect of the left hand; the soft parts were torn off and the flexor tendons exposed. The wound was dressed antiseptically, and did well for three weeks, when tetanus developed; the patient suffered greatly from dyspnoea, and died in a convulsion. The pulse had been strong and regular, slightly faster than normal, the temperature 99° to 101.6°, the respirations 40 to 50. At the autopsy the brain and spinal cord were found intensely congested, the lungs congested and œdematous, the pericardium containing one hundred cubic centimetres of blood, the cavities dilated, the ventricular walls thin, the muscular tissue brownish, and the valves competent, with a few small patches of atheroma in the mitral valve. There was an opening in the right ventricle large enough to admit an ordinary probe. The walls around it were about a line in thickness. One was, therefore, a case of rupture of the heart, the seat of myocarditis, with marked diffuse nephritis, and the other of rupture in the convulsions of tetanus, the heart being normal.

ABSCESS OF THE FIRST AND SECOND DORSAL VERTEBRÆ; DEATH WITH CYANOSIS.—Dr. CHAPIN had seen a female child, two years and eleven months old, brought to the dispensary on the 5th of September, having a cough and a wheezing sound over the chest. Nothing but some bronchial and tracheal râles could be made out. The temperature was normal. The child improved. About three weeks later the mother stated that the patient, while playing, turned blue in the face and suddenly died. The first and second dorsal vertebræ were found to be the seat of a large abscess; there were tubercles in the lungs and trachea; there was also an enlarged cheesy bronchial gland. There had been no dysphagia.

CARCINOMA OF THE STOMACH, LIVER, SPLEEN, AND INTESTINE.—The specimens were sent by Dr. STICKLER. The patient, a man, was fifty-two years of age; had been well up to fifteen months previously. There was no family history bearing on the case. Symptoms began with abdominal pain, for which anodynes and counter-irritants were applied. The pain extended to the right hypochondrium; there was vomiting, but never of pure blood or chocolate-colored matter; the patient rapidly became emaciated. There was constipation, and the urine was scanty; cancerous cachexia appeared. Later on, an irregular tumor was felt at the pyloric end of the stomach. At the autopsy the cæcum was found so constricted that it seemed impossible for fæces to have passed; the transverse colon was drawn downward and attached to the ascending colon, and also to the gall-bladder and spleen; the liver was small, firm in consistence, attached to the spleen by fibrous bands; the stomach lay behind the liver, was the seat of cancerous degeneration, and was much smaller than normal.

Dr. PETERS made a few remarks on scarlet fever in horses.

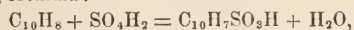
PHILADELPHIA COUNTY MEDICAL SOCIETY.

Meeting of October 17, 1883.

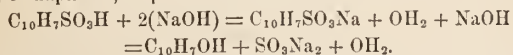
NAPHTHOL—ITS MEDICINAL USES AND VALUE.—Dr. JOHN V. SHOEMAKER read the following paper:

Naphthol is one of the remedies of recent introduction, and of the two products of that name the β naphthol is the one which was first used by Professor Kaposi as a substitute for the tar preparations in skin diseases. It was thought by him to be the essential and curative ingredient of tar, while it was free from the objectionable features of the latter. My attention was directed to this remedial agent by Dr. Justus Wolff, a chemist largely interested in the manufacture of coal-tar products, who kindly furnished me a paper on the chemistry of this substance, along with an account of some novel properties which he had observed in it. As this paper, however, is too long for reproduction here in its entirety, and, besides, is largely of chemical interest only, I will here give it briefly in abstract as far as will be necessary to acquaint us with the chemical character of its subject, as follows:

Naphthol is a derivative of naphthalene, a hydrocarbon found in large quantities in coal-tar, belonging to the so-called aromatic group. In the fractional distillation of coal-tar, various hydrocarbons are obtained at different degrees of heat. Thus, at 80°C ., benzol distils over; between 80° and 110°C ., benzol and toluol mixed; at 111°C ., toluol alone; from 111° to 136° , toluol and the different xylenes mixed; from 136°C . to 142°C ., xylenes only; then the cumenes, phenol, and cresols; and at 218°C ., naphthalene, which sublimes in colorless, transparent, brilliant, crystalline plates, possessed of a disagreeable, pungent odor, the empirical formula of which is C_{10}H_8 . Naphthol is produced from this by a substitution of one of the hydrogens in naphthalene by one molecule of hydroxyl = OH. According to the different positions of the hydrogen substituted in the naphthalene by the hydroxyl, two different naphthols are obtained, of which one is called α naphthol, and the other, the one we shall alone speak of hereafter, is the β naphthol of the formula $\text{C}_{10}\text{H}_7\text{OH}$. The naphthols demonstrate the advantage of a knowledge of the relative and positive positions of substitution in order to understand the cause and constitution of the different offsprings from simple or compound constitutions. The method of producing naphthol is like the general process employed in effecting hydroxyl substitutions by first producing monosulpho substitutions, by means of strong sulphuric acid at certain temperatures, and melting the monosulphonated compound with sodium hydrate, the ordinary dry caustic soda. In the case of naphthalene treated thus with sulphuric acid, the naphthalenmonosulphonic acid is produced according to the following formula:



which, on being melted with sodium hydrate, yields naphthalene hydroxyl, or naphthol, as per formula herewith:



According to the different temperature employed in the sulphonation of the naphthalene, either α or β naphthol is derived by the last process. The naphthols thus produced are usually purified by distillation and brought in the market as crystalline masses of a reddish color, and a disagreeable and pungent odor, as shown in the specimen herewith submitted. The β naphthol crystallizes in scale-like clinorhomboidic laminæ from watery solutions, while in a molten state it represents clinorhomboidic prisms. It dissolves in 520 parts of water at 60°F ., and in 75 parts of boiling water. It is readily soluble in alcohol, ether, and chloroform. An aqueous solution is colored yellow by chloride of lime, and, by heating this solution, yellow flakes separate. It melts at 122°C . (Schaeffer), but a mixture of both α and β naphthol melts at a lower temperature than either alone. Compounds with alkaline metals or ammonia and alkaline earths are not stable, and separate easily, either by evaporation or in contact with carbonic acid. The naphthols stand in the same relation to naphthalene as phenol to benzol and cresols to toluol. If one of the six hydrogens in benzol is

replaced by hydroxyl, phenol is obtained; in the same way are cresols and naphthols formed. By this analogy of constitution of naphthols, phenol, and cresols, the inference may easily be arrived at that they may prove alike in their disinfectant character as well, and in order to prove this I undertook a series of experiments. Of course, the commercial naphthol for that purpose was out of question, and I experimented, therefore, first to obtain a naphthol free from odor. As the crude article contains, as contaminations, sulphur and sulphurous acid, the sublimates thereof will yield, besides the naphthol crystals, also sulphureted hydrogen, thionaphtholes, carbolic and cresylic acid, thio-phenols, and the like, to which ordinary naphthol owes its pungent and disagreeable odor. I avoided this all by passing a rapid current of steam through its aqueous solution, expelling thus all volatile by-products, and obtained naphthol in its greatest state of purity, in beautiful silver crystalline scales, as here submitted. This naphthol may again be sublimed and obtained, then, in elegant white crystals, as here shown; but, by the heat employed, more or less decomposition again takes place and renders the product somewhat odorous and pungent.

In order to test the disinfectant and antiseptic properties of my inodorous naphthol, I added one part thereof, in powder form, to 480 parts of urine, which, at the expiration of six months, at a varying summer temperature, manifests no odor or signs of decomposition, while another of the same urine, without addition of naphthol, had a strong putrid odor after standing for three days only. To this latter I added, after standing thus for eight days, some of my inodorous powdered naphthol in the above-mentioned proportion, and in twenty-eight hours it had lost its putrid odor, and has kept thus up to the present writing, when no putrefaction or signs of it can be detected in either specimen. The same experience I have had with meat immersed in a solution of naphthol in 520 parts of water, as well as in other experiments similarly conducted. Experiments with solutions of the compounds of naphthols with alkalis or alkaline earths prove that these act very much less antiseptically than the solutions of pure naphthol soaps, containing four to ten per cent. of free naphthol, and found excellent and serviceable in removing odors of putrefaction or decomposition from hands or cloths. They are also very efficacious in destroying clothes- or body-lice, as naphthol is a very active parasiticide. If naphthol is evaporated by means of heat, the air in rooms contaminated, in consequence of disease or otherwise, will be found to be rapidly deodorized and rendered fresh and sweet without other odors, making it thus of the greatest value for sick-rooms, hospital wards, dissecting-rooms, etc. As carbolic acid has many disadvantages, and is not the deodorant or antiseptic *par excellence*, the inodorous naphthol can certainly take its place in every respect.

As naphthol has been described variously as poisonous and injurious to the animal economy, which by its composition and analogy was not apparent, I felt it my duty to experiment with it in regard to such, and commenced at once, without hesitation, by taking it internally; one part dissolved in 3,000 parts of water produced at first heart-burn, a slight sensation in the right lumbar region, and some dizziness. Of that solution an equivalent amount was taken to represent a half-grain. These symptoms disappeared after continuing its use for some days, and, while the urine showed upon analysis traces of naphthol and naphthol compounds, no albumin or blood could be detected therein. The doses then were gradually increased to four grains per day for six days, and still no untoward symptoms were discovered, while the warmth in the stomach, directly after taking, was followed by increased appetite. Dr. Schofield, of Albany, reports to me that, upon my solicitation, he has used it largely, at first experimentally in the Albany Hospital, where it has now become a staple article, and is used almost entirely to the exclusion of other disinfectants and antiseptics. They use it there for all kinds of disinfection in wards, sick-rooms, for wounds, etc., and have abandoned carbolic acid in all but a few cases, and always with the greatest satisfaction and success.

Thus far the paper of Dr. Wolff. His experience, as well as that of Kaposi and others, led me, some eight or nine months ago, to employ it both in private and hospital practice, and the success attained with it soon led me to further experiments. I found it to fully sustain the claim that Kaposi had made for it

in scabies, psoriasis, and chromophytosis, as well as in some of the chronic forms of eczema, in which it not only allayed the itching attendant thereon, but lessened the infiltration as well. In wounds and indolent ulcers I have found it a most useful detergent and deodorant, removing the fœtor and establishing healthy action of the parts. Aqueous solutions, containing half a grain to the ounce, I have used to great advantage as vaginal injections, especially in leucorrhœa and uterine carcinoma, as well as in gonorrhœal affections, both in males and in females. In diphtheritic throat affections it made a most useful gargle, as well as to remove the fœtor of catarrhal and other affections of the buccal cavity. Its greatest value, however, arose from its disinfectant action on the evacuations of fever patients and the rooms containing them, while by its absence of odor it did not tend to produce inconvenience either to patient or attendants. Combined with powdered talcum or starch, or both, and dusted into the shoes or stockings of those affected with fetid exhalations of the feet, it acts most satisfactorily, and its effects are equally as good in the same affection involving the hands and the axillary and inguinal regions. Combined with other ointments in the proportion of from one to ten grains to the ounce, it not alone preserves the unguent from decomposition, but exercises also an antiseptic action on the parts and the exudation therefrom. A slight admixture to an experimental sample of lard has preserved the same in excellent condition throughout the hot summer months. In chronic psoriasis, particularly when there is great infiltration, a five- to fifteen-per-cent. ointment has frequently been attended with good results. It has also been very effective in squamous and fissured eczema, used in combination with lard or gelatin.

To test for myself its antiseptic properties in comparison with those of carbolic acid, I mixed the whites of two eggs with an equal weight of water and took one half of this mixture in one phial, adding one grain of crystallized carbolic acid, while to the other half, in another phial, I added one grain of Dr. Wolff's odorless naphthol. After the expiration of five days the carbolized albumin assumed a putrid odor, whereas the naphtholized part, though discolored by the naphthol, remains to this day—twenty days after the experiment—without odor. A quantity (about half a pound) of meat, already commencing to putrefy, was also at the same date immersed in a saturated aqueous solution of naphthol, with the effect of arresting the putrefaction and preserving it for some time.

After using naphthol so long and successfully without any untoward occurrences, I read, to my astonishment and alarm, that Dr. A. Neisser, in the "Centralblatt für die medizinischen Wissenschaften," 1881, No. 30, reported most extraordinary toxic effects obtained with naphthol, and that also Kaposi reported having seen hæmaturia, ischuria, vomiting, unconsciousness, and eclamptic attacks in a boy after the external application of naphthol; also that Squire reports, in the "British Medical Journal," January 14, 1882, its producing blisters and irritating the skin. Dr. Piffard regards it as a dangerous remedy, and Professor Rapon, while he reports good results with it ("British Medical Journal," p. 750) in scabies, prurigo, and eczema, advises in prolonged cases simple ointment to be substituted every fourth week, to avoid any possible risk of absorption. Dr. Neisser stated that one gramme of a saturated solution (which in water would contain about one thirtieth of a grain of naphthol) injected hypodermically in a dog produced hæmoglobinuria, and shortly afterward death. To verify these accounts and satisfy myself of the toxic effect of pure naphthol, if any it possessed, I administered to one rabbit, repeatedly in twenty-four hours, thirty-four minims of a saturated aqueous solution, hypodermically, without any result, either to inconvenience the animal, increase his temperature, diminish his appetite, or cause a lethal

effect. This method of treatment was pursued for five days, not fewer than four to five injections being made each day, and the result was still the same. Determined to obtain toxic effects with it, and, if possible, to demonstrate its toxic action by a post-mortem examination, another rabbit was fed, at first every three hours, with one-grain pills of naphthol, and subsequently with two- and four-grain pills, at the same intervals, but, beyond increasing the appetite of the animal, no special effects were apparent. In consideration of this, one of my assistants, Dr. Charles S. Means, and my student, Mr. F. C. Waterman, volunteered to take naphthol themselves internally, to test, if possible, its action upon the human organism. They commenced with one-quarter-grain doses every two hours, their pulse, temperature, and urine being subjected to the closest inspection both before and after. The second day they took a half-grain every two hours; the third, one grain every three hours; the same on the fourth, while on the fifth and sixth they took two grains every three hours, and on the seventh, five grains twice daily. The pulse and temperature did not appear to be affected by this, nor was at any time albumin or blood apparent in the urine. Though they experienced great warmth in the epigastric region after each dose, that passed away in a short time, but left them with slight vertigo, buzzing in the ears, with all evidence of cerebral hyperæmia. The alvine evacuations were softened and of mushy consistence, changed to a clay color, and in one of the cases increased to diarrhœa.

Arriving at a *résumé* of my experiments, I must certainly proclaim the odorless naphthol which I had received from Dr. Wolff as not a toxic agent; and, while I have found it a most useful remedial substance, and a disinfectant and antiseptic of the greatest value, it does not, in my experience, confirm the dangerous influence exercised on the human organism as reported by the gentlemen above quoted, a fact for which I can only account by the greater purity of the material used by me—purified from the deleterious contaminations above enumerated by the process already described, which is not employed abroad, where yet naphthol is sold and used as reddish crystalline masses, with strong, pungent, and disagreeable odor. That it is far superior to carbolic acid and other disinfectants and antiseptics I have no doubt, and I am informed that in price it is not alone cheaper than the former, but, by its greater efficacy and the smaller amount necessary, it is certainly more advantageous, aside from its greatest recommendation of being almost absolutely odorless. It must be borne in mind that all my remarks apply to odorless naphthol—only such as I have exhibited—and that I consider that alone as safe for medicinal use.

NOTE ON HYDRARGYRUM FORMAMIDATUM.—A paper with this title was read by Dr. JAMES C. WILSON: Some accounts of this preparation have appeared in recent journals. Toward the close of last year, Professor Liebreich proposed, in a meeting of the Berlin Medical Society, a new drug for the treatment of syphilis by the hypodermic method. Chemically this drug belongs to the amide group. Liebreich was led to use it from the fact that the ordinary amides of the body, of which urea is the principal one, are eliminated in an undecomposed state. When, however, the amide is in combination with a metal, decomposition occurs, and the metal is reduced and deposited. Liebreich found, by actual experiment, that this statement is true of mercury. It is supposed that the formamidated mercury, after hypodermic injection, undergoes decomposition, and that the metal mercury is set free in the tissues. The preparation is soluble in water, of neutral reaction, does not coagulate albumin, is not precipitated by caustic soda, and the presence of mercury can be demonstrated by potassium sulphide. It produces its effects very surely and rapidly. Liebreich regards it as the best remedy known for the hypodermic treatment of syphilis by mercury,

as it is but little liable to excite local troubles or salivation. Later ("Medical Times and Gazette," July 7, 1883), we find that Professor Zeissl, in Vienna, after trial of this remedy in fifteen cases of syphilis, was well satisfied with the results. In three of these cases salivation was produced. Some pain followed its injection, which was not, however, so severe as that following the hypodermic use of mercuric bichloride. Twenty injections was the maximum number required to disperse the manifestations, even in severe cases.

Dr. Schacht, of Berlin ("New Remedies," Sept., 1883), writes as follows: "Formamide is a colorless liquid, boiling at about 195° C., which can be distilled without decomposition only in vacuo. It is prepared by acting upon formate of ethyl by ammonia. When pure, it is neutral, but easily becomes acid. If a *concentrated* solution of formamide be *boiled* with precipitated mercuric oxide, decomposition ensues, and metallic mercury is separated. On the other hand, if a *dilute* solution of formamide be *warmed* on the water-bath with precipitated mercuric oxide, a clear, colorless solution results, in which soda (hydrate of sodium) produces *no* precipitate. Sulphide of ammonium, however, precipitates the mercury as sulphide, both from the formamide of mercury and from mercuric chloride. Solution of albumin precipitated by the latter salt, but *not* by the formamide. Formamide of mercury is prepared in the following manner: 10 to 13 grms. of freshly precipitated, completely washed, and still moist mercuric oxide are gently warmed with a little water in a porcelain capsule, with gradual addition of 10 grms. of formamide. As soon as solution has taken place, the resulting colorless liquid is filtered into a litre-flask, and the latter filled to the litre-mark with distilled water. Each cubic centimetre contains 0.01 gram. of mercury, which is the quantity representing *one* hypodermic dose. Formamide of mercury keeps well in brown-colored bottles, and should also be dispensed in these."

In a note from Vienna ("Medical News," October 13, 1883), it is stated that Professor Neumann is now trying hydrargyrum formamidatum on a large scale as an anti-syphilitic. It is used hypodermically in doses of 1 c. c. It acts with far greater efficacy upon the recent efflorescences than upon the later manifestations. Pain of great severity and active local inflammatory troubles have resulted in Neumann's cases. The preparation which I exhibit, made by Merck, of Darmstadt, is a one-per-cent. aqueous solution, and the dose of it from half to one ordinary hypodermic syringeful. It has not been possible to obtain this drug in this city until the present time. I would be glad to place the specimen which is exhibited in the hands of any member of the society who may desire to make a trial of it chemically.

THE TREATMENT OF PSORIASIS.—Dr. ARTHUR VAN HARTLINGEN read the following paper: Psoriasis is one of the commoner skin diseases met with in this country. The statistics of the American Dermatological Association show that it occurs in the proportion of about six per cent. in all diseases of the skin encountered. Daily experience would seem to indicate a still more frequent occurrence, because the affection is a disfiguring and annoying one, and therefore patients are more inclined to seek relief, and also because it is a stubborn disease and greatly prone to relapse. The history of a single case will often extend over many years, and bring it under the observation of a number of different physicians. It is because of the comparative frequency with which psoriasis is met and its stubbornness to treatment that I have selected it as the subject of my remarks this evening. Having had a good deal of experience in the treatment of the commoner forms of the disease, it is my intention to confine myself chiefly to the consideration of such remedies as have come under my own observation and use, only touching incidentally on others.

The object of treatment in psoriasis is the removal of the eruption as it exists upon the skin. We can not hope with any degree of certainty in any given case to prevent a recurrence of the disease, or, if you please, a relapse. For the drug has not yet been discovered which will surely take away all tendency to the recurrence of psoriasis; and whoever promises a cure, in the wider sense of the word, to his patient, will, in a very great number of cases, find that he has been too sanguine. Fortunately, however, a certain number of patients do seem to recover. I do not know what has been the experience of others in this respect, but I have patients who have been under observation three, five, even eight and ten years without relapse. Such cases are, unfortunately, few.

Pre-eminent among the internal remedies which are useful in the treatment of psoriasis is arsenic, which may be justly called a specific in this disease. I think I am not asserting too much when I say that eight out of ten cases of psoriasis of average character and severity will do better under the use of arsenic than with any other remedy. I prefer Fowler's solution, given in the average dose of four minims thrice daily. I think this solution is often prescribed in too large doses, and I am sure the dose of five to ten minims, as given in the books, is too large for ordinary use. Most patients bear a four-minim dose very well, but there are idiosyncrasies. I have sometimes been obliged to limit the dose at the beginning to one minim in cases where subsequently such toleration has been established that twelve minims have been taken with impunity. However, four minims is a good dose to begin with, and, if the effect does not begin to show itself within ten days or two weeks, the amount may be gradually increased. Fowler's solution should never be given to the patient in a phial with directions to drop out the requisite number of drops. The patient is apt to make a mistake, phials of different sizes may pour out more or less in each drop, and there is always danger in leaving a half-empty phial of poison about the house. The solution is better given mixed with water, or with wine of iron or other convenient vehicle. The effect produced by arsenic upon the eruption of psoriasis is, first, in diminishing the quantity of epidermic scales thrown off, and then in preventing the appearance of new lesions. The patches gradually lose their scalliness, begin to heal in the middle, and disappear little by little. It must be remembered, however, that arsenic is a slowly acting remedy, and its use should be continued through many months to get the best security against relapse. The other liquid preparations of arsenic used in psoriasis are Pearson's solution of the arsenate of sodium, and Donovan's solution of the iodide of mercury and arsenic. I have used the former in a few cases without noticing any perceptible difference as regards efficiency between it and Fowler's solution. The solution of mercury and arsenic (Donovan's) I have employed in certain stubborn cases with good effect where Fowler's solution has seemed to fail. The existence of syphilis as the cause of the eruption in these cases having been excluded, I am at a loss to account for the apparently greater efficacy of the mixed treatment. The dose given was as much as ten drops, and, although this solution is weaker in arsenic than Fowler's, yet I am inclined to the opinion that the conjoint administration of the two drugs, mercury and arsenic, was the cause of the good result rather than the increased dose. I should be inclined to use Donovan's solution in cases where Fowler's solution had failed. The mixture of arsenious acid, black pepper, and sugar of milk, known as Asiatic powder, and recently placed in the Pharmacopœia with the pepper left out, among the triturations, is of no particular value above the other preparations, and is not so convenient of administration. Hypodermic injections of solutions of arsenic have been employed in the treatment of psoriasis, but I have had no experience in their use.

Next in value to arsenic in the treatment of psoriasis is iron. I commonly employ the tincture of iron in cases where arsenic does not seem indicated. There is one type of psoriasis which includes robust, rosy, well-nourished individuals, "the very picture of health." Such people have never been sick a day in their lives, or perhaps may have had slight attacks of articular rheumatism. Such patients do well under arsenic. But there is another type in which the individual is thin, poorly nourished, and perhaps somewhat anemic. These are the cases which do well under iron, which is best administered in the form of the tincture of the chloride. With these two remedies, arsenic and iron, I usually succeed in curing ordinary cases of psoriasis, adding in rare cases cod-liver oil to the use of the tincture of iron when debility is present. Of course, local applications are employed at the same time. Of these I shall speak presently.

In addition to the internal remedies mentioned, quite a host of others have been employed from time to time. Such are tar, carbolic acid, copra, phosphorus, tincture of cantharides, tincture of maize, carbonate of ammonium, acetate of potassium and other diuretics; the alkalies, as liquor potassæ and the alkaline mineral waters. Of these, I have found alkalies and diuretics useful in cases when a markedly inflammatory condition of the skin has existed. The other remedies I have not employed, nor do I think the reports of their usefulness based on a sufficient number of facts, except in the case of tar possibly, to make it worth while to try them.

Equally important with the internal treatment of psoriasis is the external management of the disease. It is, of course, desirable to remove the eruption as soon as possible, wherever it may be situated; but when it is found upon the face, there is every reason to endeavor its cure by all means, and in the shortest time. External and internal treatment should therefore be combined when practicable. The first thing to do is to remove the scales. This may be done by means of local or general baths, wet dressings, etc., or by inunctions with fats and oils, by the use of soap, or by the action of impermeable dressings of india-rubber or oil-silk. When only a few lesions are to be acted upon, a solution of salicylic acid in alcohol, one part to sixteen, well rubbed in with a sponge, will remove the scales very nicely. The scales having been removed, the next thing is to apply such substances to the diseased patches as may most quickly modify the abnormal condition of the skin, and bring it back again to a healthy condition.

An innumerable number of applications have been recommended for this purpose, the most of which I shall pass over with only a mention. Such have been soaps and alkalies, citric and hydrochloric acids, sulphur, iodine, and mercury, alone and in combination, together with the various forms and preparations of tar, creasote, and carbolic acid. All of these remedies have their uses, and most of them, especially the tarry preparations, I have employed time and again in years gone by, and with moderate satisfaction. The introduction, however, of chrysarobin or chrysophanic acid, some six or seven years ago, put quite a new face on the local treatment of psoriasis; and since then, with the aid of this and other later discoveries, we are able to work a much more rapid change in the appearance and condition of the skin in this disease. As chrysarobin is perfectly well known to all here present, both as to its advantages and defects, I shall say but little about it in the ordinary form of its application, namely, as an ointment. When it first came out I tried it quite extensively, but its disadvantages seemed so great that I had already begun to restrict its use greatly in my practice, when a new agent appeared, which, for every-day use, has in my hands, until very recently, almost entirely superseded all other local applications. I refer to pyrogallie acid.

I do not think pyrogallie acid is by any means so well known as an application for the relief of psoriasis as is chrysarobin. If I may judge by the infrequency with which its virtues are mentioned in the journals (although I believe all recent text-books speak of it), it is not in general use. But it is, in my opinion, one of the very best remedies we have for the cure of cases of psoriasis of average severity. Employed in the form of ointment, of the strength of one half to one drachm of the pyrogallie acid to one ounce of simple ointment, the effect produced by it is almost as rapid and decided as that brought about by chrysarobin, without the accompanying discoloration. A slight blackish staining is all that is produced, and the ointment can even be employed in the scalp without markedly discoloring the hair, if applied cautiously. It is desirable, however, not to apply soap or alkalies at the same time, because this causes a more permanent and deeper stain. Pyrogallie acid can not be used in extensively generalized psoriasis, when large surfaces are affected by the disease, without a certain amount of danger from absorption, as indicated by strangury and olive-green or tar-colored urinary secretions. With care, however, and the occasional suspension of the remedy for short periods, I believe this remedy could be employed, even in universal psoriasis, with good effect.

One more external application in psoriasis remains to be spoken of—namely, naphthol. This drug, a derivative of coal-tar, was introduced into use several years ago by Kaposi, of Vienna, as a sort of substitute for carbolic acid. He recommends it very highly in psoriasis, in the form of ointment, about eighty grains to the ounce, and I have used it in this and other strengths, and also in solutions in alcohol and oil, with fairly good effect.* Naphthol is not so active in its effect as chrysarobin or pyrogallie acid, but it is much more agreeable, and is, I think, peculiarly well adapted for employment upon such parts as are exposed to the view, as the face and hands. Like pyrogallie acid, it must be used with caution over large surfaces, as absorption with toxic effects may be produced.

It remains to mention briefly two or three methods of application of these remedies which have recently been brought forward. The first of these is the treatment by medicated gelatin which was introduced by Professor Pick, the well-known dermatologist of Prague. My attention was first drawn to this by a pamphlet which Professor Pick kindly sent me, in which he gave an account of his earlier experiments with medicated gelatins, but I have not as yet had an opportunity of testing this method of medication as I should desire. I may say, however, that the method does not seem to me calculated to prove convenient and popular in private practice. I had for some time been making some experiments in my service at the Polyclinic in the preparation of gelatins impregnated with chrysarobin and pyrogallie acid, but without much satisfaction, when Dr. Charles L. Mitchell, the well-known pharmacist of this city, sent me some excellent preparations of his own, which seem to be perfectly adapted to the purpose for which they are intended. A bit of one of these gelatin sticks is cut off and placed in a water-bath, where it soon melts into a clear homogeneous fluid, which may then be applied to the lesions of the skin by means of a paint-brush. The advantages claimed are cleanliness and transparency. The coating of gelatin does not rub off on the clothes, and is therefore not so dirty as an unctuous application. A fresh coating can be painted on every day or two as the old

* In a communication read before the American Dermatological Association last month, and published in the "American Journal of the Medical Sciences" for October, I have given the results of my experience in the use of naphthol in various diseases of the skin, psoriasis among the number. I may refer to that paper for further details as to the action of the drug in this disease.

layer wears off. The chief disadvantage of this method of treatment is that it requires apparatus which is not convenient to carry about, nor can the patient be trusted to employ it at his discretion. My own experience is that in psoriasis, at least, the gelatin applications are not active enough. I have not, however, used them with sufficient frequency to pronounce a positive opinion.

Recently a solution of chrysarobin in collodion has been recommended in the treatment of psoriasis by Dr. George H. Fox, of New York, and several dermatologists have confirmed his statements with regard to its efficacy. I have employed this preparation in one or two instances, but it has seemed to me so much less active than the chrysarobin ointment that I have not been encouraged to continue its use. It has one great advantage over the gelatin applications, however, and that is, that it can be applied extemporaneously and without the paraphernalia which must accompany the use of the gelatin.

A few weeks since a pamphlet by Professor Auspitz, of Vienna, reached me, in which that distinguished dermatologist recommended liquor gutta perchæ as a vehicle for the application of chrysarobin. I at once obtained a ten-per-cent. solution, or rather emulsion, of chrysarobin in liquor gutta perchæ, and happening to have a case of psoriasis of the face and scalp under treatment, I gave some to the patient to apply once daily. The effect was so happy as to encourage me very much to hope that we have in this preparation the most convenient method of applying chrysarobin yet devised; and as chrysarobin is, after all, the most efficient local agent in the treatment of psoriasis as yet brought forward, I have no hesitation in urging the trial of this preparation on any one who may have a case of psoriasis under treatment. It is to be noted, however, that the same watch must be kept upon the skin, for fear of exciting dermatitis, as when the ointment is used. Only when the liquor gutta perchæ dries, which it does very quickly, there is little or no danger of rubbing the chrysarobin over the good skin, nor is there much danger, if any, of staining the clothing.

Miscellany.

THERAPEUTICAL NOTES.—*The Therapeutic Use of Douches of Compressed Air.*—M. Maurice Dupont has obtained good results ("Bulletin général de thérapeutique," September 30, 1883) from the therapeutic use of douches of compressed air. M. Dupont believes that aërotherapy need not be confined to the treatment of diseases of the lungs and respiratory passages, but that it may be applied effectively to various affections characterized by perverted nutrition. By the influence, mechanical and chemical, of an atmosphere more dense and richer in oxygen, it is possible to increase, decrease, or modify the processes of nutrition when they are perverted. He has extended the methods of application to embrace baths and douches, in order to make use of the mechanical force of compressed air as an agent of "flagellation," and the cold produced by its liberation as a refrigerant. The douche of compressed air, applied like the douche of water, is of benefit to patients of delicate constitution, who would be proper subjects for hydropathic treatment, if they reacted better after the use of cold water. M. Dupont employs compressed-air douches under a pressure of three atmospheres. The air is conducted through a pipe of canvas and caoutchouc, provided with a nozzle eight to ten millimetres in diameter at its orifice. The jet of compressed air is directed against the patient, who lies stripped upon a couch.

The results are: 1. "Flagellation"; deep depression of the integument where the air strikes it; displacement and gliding of the superficial upon the deeper tissues; veritable *massage*, which sends back the blood in the vessels from the periphery to the center.

2. Cooling of the skin and rapid reaction due to the energetic flagellation, which brings a glow to the surface. The patient, as soon as douched, dresses himself, no friction being required to warm him up. Not having been wet, he is not exposed to the evaporation which follows the use of water, and which, by the subsequent rechilling it causes, is liable to neutralize the good gained by the reaction. If, however, the patient be vigorous enough to justify it, the lowering of temperature by the douche may be made still greater by mixing a little water with the air. The water is thrown in a finely divided condition, and the current of air produces a very rapid evaporation, and therefore a marked reduction of temperature. Indeed, this may be carried low enough to produce local hemi-anæsthesia. The douche not only leaves a feeling of warmth all over the surface, but it produces a marked sense of freshness and vigor. However great the reduction of temperature may have been, a reaction will almost invariably follow, and follow almost immediately. The anæsthetic properties of the douche may be increased by mixing carbonic-acid gas with the air. M. Dupont believes that the douche of compressed air is indicated in: 1. Pulmonary tuberculosis, chlorosis, anæmia, obesity, rhachitis, etc., to increase the activity of the nutritive processes. 2. (Edema, hydrarthrosis, ankylosis, etc., to improve the circulation and favor the absorption of effused liquids. 3. Various cases of paralysis, as an adjuvant to electricity. 4. Hyperæsthesia, hysteria, contracture, etc.

The Presence of Sulphate of Quinine in Sulphate of Cinchonine; the Extraction of Sulphate of Quinine from Cinchona Bark.—In discussing these topics before the Paris Therapeutic Society, M. Catillon raised the question whether the febrifuge properties attributed to sulphate of cinchonine were not due to the sulphate of quinine which the former salt, as prepared for commerce, contained in considerable quantity. M. Dujardin-Beaumetz expressed the belief that the sulphate of cinchonine acted like the sulphate of quinine, but that its action was not so regular or so energetic. It was a sort of "second-chop" sulphate of quinine [*de second marque*]. Furthermore, the researches of M. Moutard-Martin had shown definitely that it possessed febrifuge properties. M. Tanret thought that the proportion of alkaloids in the different varieties of cinchona bark was a matter of more importance to manufacturers of quinine than to pharmacists. In point of fact, but a small part of the alkaloids of the bark—a third part only—was soluble, and appeared in the various pharmaceutical preparations of cinchona. The rest was insoluble, and, together with the red coloring matter, remained in the residuum. M. E. Petit could not share this opinion. In the first place, specimens of cinchona bark were to be found in commerce which did not contain a trace of quinine. There was, then, a great advantage in analyzing the bark before using it in pharmacy. Moreover, three quarters of the alkaloids of cinchona obtained from Java could be extracted by water alone, and the entire strength of the bark could be exhausted with fifty-six-per-cent. alcohol. Furthermore, according to the new *codex*, it was allowable to extract the alkaloids first by the action of water, and to complete the extraction by means of an acid liquor. M. Tanret was confident that, even with an acid liquor, all the alkaloids could not be extracted, at least without the use of a prejudicial quantity of acid. He promised to communicate the results of his experience on that point.

Disease Germs; their Vitality; Means of Rendering them Innoxious.—M. Paul Bert, President of the Paris Society of Biology, in discussing the question of disease germs recently before that society, said that he had received numerous letters from persons engaged in handling mercury who believed that their occupation afforded them immunity from contracting cholera. Workers in copper are said to enjoy a like immunity from the disease. These supposed facts led M. Bert to seriously question whether there did not exist for each sort of disease germ a destructive agent in the presence of which the germ was unable to develop. M. Davaine, with the view of answering this same question, instituted a series of experiments upon the bacteria of anthrax. M. Bert, with M. Capitan, undertook a similar series of experiments upon the virus of glanders. This virus, "sown" in solutions of sulphate of copper, bichloride of mercury, chloride of gold, or in oxygenated (? ozonized) water, was not fruitful; on the contrary, its development was rapid in solutions of permanganate and of carbonate of potassium.

A first question relative to the vitality of disease germs is, then, one of the medium in which they find lodgment. But the question is also pertinent if, even in a hostile medium, the germ can not multiply if the quantity of the virus is considerable, or if the medium which receives it is not up to the standard strength, as, for example, an organism that has been overworked and exhausted. M. Bouley observed that it was a matter of daily observation that jaded animals were more liable than others to contract glanders or other contagious diseases. The experiments of M. Chauveau on sheep proved that large quantities of virus would avail when small quantities were inert. He produced anthrax in animals by the introduction of virus in considerable quantities when smaller amounts introduced into the same animals had failed to generate the disease.

The Treatment of Baldness.—M. Vidal ("Gazette hebdomadaire de médecine et de chirurgie") details some points from his personal experience in the treatment of baldness. He had used blisters, but had often found ordinary blisters painful, difficult of application, and liable to cause cantharidism, unless special precautions were taken to prevent this accident. Desirous of finding a less objectionable means of producing blisters, he experimented with all the preparations of *Daphne genkwa*, but without success. Subsequently he used a preparation known in Java under the name of "Andol-andol," which had been recommended by Van Leent, of Holland. This vesicant tincture is obtained from *Lytta rubifixa*. It gave very good results, and was not painful. Having exhausted his supply of andol-andol, he tried a vesicant tincture prepared by his former pupil, M. Bidel. Two or three coats of this were applied with a brush, the surface having been previously well cleaned. Complete vesication took place, without any considerable pain, in about two hours and a half. This tincture is prepared from the *mele* by macerating for twenty-four hours, first in cold acetic acid and afterward in a water bath with four parts, by weight, of ninety-per-cent. alcohol. Thus made, it contains nearly 1·2 per cent. of cantharidin.

M. Vidal used the same tincture to blister the chest in affections of the lung and pleura. Cantharidism never occurred. The desired amount of vesicant action may be produced by the use of one or more coatings of the tincture. M. Férís is of the opinion that this treatment may be satisfactorily carried on by means of a vesicant principle, used in Cochín China, which is obtained from an insect known under the name of *bae-cap*. He had never known that preparation to cause any accident analogous to cantharidism.

Oleum Lini in the Treatment of Pulmonary Phthisis and other Wasting Diseases.—Dr. Joseph A. Stites, of Belmont, Nevada ("Cincinnati Lancet and Clinic," October 20, 1883), advocates the use of oleum lini as a substitute for oleum morrhuae in pulmonary phthisis and all other wasting diseases. He has obtained better results with it than he could get with cod-liver oil, or with any of its emulsions. No attempt should be made to push the oil until diarrhoea is produced. The old rule requiring this should not be followed. Comparatively small doses are quite sufficient. Oleum lini may be made palatable by combining it with honey and with any of the maltine preparations, as in the following formula: R Ol. lini (raw), ʒ j; mel. rosæ, ʒ ss; maltine, q. s., ad ʒ iv. M. Sig. A tablespoonful three times a day. If desired, brandy, whisky, or other alcoholic stimulant may be added. Thus prepared, either with or without any preparation of alcohol, linseed-oil will be taken by patients uncomplainingly, and oftentimes with a marked improvement in their nutrition, and with all the benefits which such improved nutrition produces. Children convalescing from fever or whooping-cough, or who are the victims of malnutrition from any cause, are benefited by oleum lini. They may be given a teaspoonful or more of the above-mentioned mixture, according to age. The old idea that linseed-oil impairs digestion Dr. Stites believes to be erroneous, if it be given in moderate doses and in a palatable form.

[As many of our readers are doubtless aware, linseed-oil has been used a good deal in New York of late years, at the suggestion of Dr. Samuel Sherwell, of Brooklyn. It has been found that bread made with a certain proportion of linseed-meal mixed with the flour is not unpalatable.]

The Administration of Powdered Meat.—M. Catillon proposes ("Gazette hebdomadaire de médecine et de chirurgie") a new formula

by means of which powdered meat may be given without exciting the aversion of patients. It is as follows: To two spoonfuls of the powder add a little sugar and two spoonfuls of Madeira wine. Mix thoroughly, and, after the sugar has been completely dissolved, add four spoonfuls of water. The thorough mixture of the meat-powder with the wine before adding the water is essential to the complete suppression of the disagreeable odor of the powder.

QUINIDINE AND ITS ALLIES.—Researches into the action of the secondary alkaloids of opium resulted in the valuable addition of codeia to the *Pharmacopœia*. The investigations of M. Laborde give reason to hope that benefit may arise to medicine from the further study of the alkaloids other than quinine, which are found in cinchona bark. That observer has lately given much attention to the study of the physiological action of quinidine. This principle he finds to agree with cinchonine and cinchonidine in producing convulsive movements of the body, while quinine appears to be incapable of doing so. A guinea-pig, beneath whose skin some sulphate of quinidine was injected, quickly passed into a stupid semi-conscious state, and was seized with opisthotonic convulsions. Tonic and clonic muscular contractions succeeded one another till death by asphyxia ensued three quarters of an hour after the injection. Cinchonine and cinchonidine possess the convulsive property in a more marked degree than quinidine. This drug, therefore, holds a middle position between the alkaloids just mentioned on the one hand, and quinine on the other; but its affinities are stronger on the side of the former group. An impure specimen of sulphate of quinine, experimented with in like manner, gave the convulsive reaction, thus proving the presence of the other alkaloids, and illustrating a remark of M. Laborde, that one advantage gained by his experiments is the establishment of a physiological test of the purity of these substances.—*British Med. Jour.*

PERINEORRHAPHY.—We are indebted to Dr. S. C. Gordon, of Portland, Me., for a copy of an interesting paper read by him at the last meeting of the Maine Medical Association, entitled "Results of Treatment of Injuries occurring at Parturition," from which we extract the following:

"In perineorrhaphy there is one caution to be observed, the lack of which has caused many a patient to regret having had it performed. I allude to the use of too many sutures. In my own practice, I have found several cases where the vaginal passage was too small, and coitus necessarily painful. This is no unimportant matter, but one that we are bound to regard. If the last suture is carried up through the undenuded mucous membrane, thereby drawing the posterior wall down and covering the wound, and by so much shortening the vagina, we obtain a perineal body sufficiently strong and thick, without closing the vulva so high as to interfere with the proper sexual relation. After no one of these operations do I allow the catheter to be used, unless the patient is unable to evacuate the bladder. Its use is almost sure to produce more or less cystitis, which continues, in many instances, for months. Neither do I allow the bowels to become constipated, much less take measures to check them. They should be kept soluble, so that no fecal impaction shall occur."

A SEVENTH SENSE.—Sir William Thomson, the eminent professor of mathematics in the University of Glasgow, in his inaugural address, delivered last week, as President of the Midland Institute, at Birmingham, broached the idea of the existence of a magnetic sense. This sense he called the seventh sense, to distinguish it from our other six senses—namely, those of sight, hearing, taste, smell, heat, and force. He said that, in speaking of a possible magnetic sense, he in no way supported that wretched groveling superstition of animal magnetism, spiritualism, mesmerism, or clairvoyance, of which they had heard so much. There was no seventh sense of a mystic kind. Clairvoyance, and so on, was the result of bad observation chiefly, somewhat mixed up with the effects of willful imposture, acting on an innocent and trusting mind. If there were not a distinct magnetic sense, it was a very great wonder that there was not. The study of magnetism was a very recondite subject. One very wonderful discovery that was made in electric magnetism was made by Faraday, and worked out very admirably by Foucault, an excellent French experimenter, showing that a piece of copper, or a piece of silver, let fall between the

poles of a magnet, would fall down slowly, as if through mud. Was it conceivable that, if a piece of copper could scarcely move through the air between the poles of an electric magnet, a human being or living creature, in the same position, would experience no effect? Lord Lindsay got an enormous magnet, so large that the head of any person wishing to try the experiment could get well between the poles; and the result of the experiment was marvelous, the marvel being that nothing was perceived. Sir William Thomson, however, was not willing to admit that the investigation was complete. He could not but think that the quality of matter in the air, which produced such a prodigious effect on a piece of metal, could be absolutely without any perceptible effect whatever on a living body. His own speculations had led him to conclude that there might be a seventh, or magnetic sense; and that it was possible an exceedingly powerful magnetic effect might be produced on living bodies that could not be explained by heat, force, or any other sensation.—*British Med. Jour.*

THE NEW YORK POLYCLINIC.—The order of clinics and courses for the regular term of 1883-'84 is as follows:

Gynecology.—9 to 10 A. M.: Dr. Wylie, Mondays and Thursdays, at Bellevue Hospital; Dr. Hunter, Wednesdays and Saturdays, at the Polyclinic. 2 P. M.: Dr. Hunter, Mondays, at the Woman's Hospital. 3 P. M.: Dr. Mundé, Fridays, at Mount Sinai Hospital. 3 to 4 P. M.: Dr. Mundé, Mondays, Wednesdays, and Saturdays; Dr. Wylie, Tuesdays and Fridays, at the Polyclinic.

Diseases of Children.—10 to 11 A. M.: Dr. Milbank, Mondays, Wednesdays, and Fridays; Dr. Ripley, Tuesdays, Thursdays, and Saturdays.

Surgery.—11 to 12 A. M.: Dr. Wyeth, Mondays, Wednesdays, and Fridays; Dr. Gerster, Tuesdays, Thursdays, and Saturdays, at the Polyclinic. 2 to 4 P. M.: Dr. Gerster, Tuesdays; Dr. Wyeth, Wednesdays and Thursdays (2.45), at Mount Sinai Hospital. 3 to 4 P. M.: Dr. Gerster, Thursdays, at Mount Sinai Hospital.

Orthopædic Surgery.—9 to 10 A. M.: Dr. Gibney, daily, at the Hospital of the New York Society for the Relief of the Ruptured and Crippled. 3 to 4 P. M.: Tuesdays, Thursdays, and Saturdays, at the Polyclinic.

Bandaging and Surgical Dressings.—8 P. M.: Dr. Cramer, Tuesdays; Dr. Kimball, Saturdays.

Operative Surgery on the Cadaver.—8 to 10 P. M.: Dr. Wyeth, Dr. Gerster, and Dr. Gibney, assisted by Dr. Wardwell and Dr. Pryor, daily.

Diseases of the Skin.—1 to 2 P. M.: Dr. Bronson, Mondays, Wednesdays, and Fridays; Dr. Robinson, Tuesdays, Thursdays, and Saturdays, at the Polyclinic.

Physiological Chemistry.—1 to 2 P. M.: Dr. Fowler, Mondays, Wednesdays, and Fridays, at the Laboratory, 215 East Thirty-sixth Street.

Diseases of the Chest and General Diagnosis.—2 to 3 P. M.: Dr. Leaming, Mondays, Wednesdays, and Fridays; Dr. Hudson, Tuesdays, Thursdays, and Saturdays.

Diseases of the Eye.—2 to 3 P. M.: Dr. Webster, Mondays, Wednesdays, and Fridays; Dr. Gruening, Tuesdays, Thursdays, and Saturdays, and Mondays at 3 P. M., at Mount Sinai Hospital.

Diseases of the Throat, Nose, and Ear.—4 to 5 P. M.: Dr. Elsberg, Mondays, Wednesdays, and Fridays; Dr. Brandeis, Tuesdays, Thursdays, and Saturdays.

Diseases of the Nervous System.—4 to 5 P. M.: Dr. Hamilton, Mondays, Wednesdays, and Fridays; Dr. Gray, Tuesdays, Thursdays, and Saturdays.

LECTURES ON ORTHOPÆDIC SURGERY.—We would direct the attention of our readers to Dr. Newton M. Shaffer's course of lectures at the New York Orthopædic Dispensary and Hospital, the arrangement of which will be found stated in our advertising pages. For several years past Dr. Shaffer's lectures have proved very acceptable to the profession.

DANGER FROM FLIES.—According to the "British Medical Journal," Dr. Grassi is said to have made an important, and by no means pleasant, discovery in regard to flies. It has always been recognized that these insects might carry the germs of infection on their wings or feet, but it was not known that they were capable of taking in at the mouth such objects as the ova of various worms, and of discharging them again unchanged in their fæces. This point has now been established, and several striking experiments illustrate it. Dr. Grassi exposed in his laboratory a plate containing a great number of the eggs of a human parasite, the *Tricocephalus dispar*. Some sheets of white paper were placed in the kitchen, which stands about ten metres from the laboratory. After some hours, the usual little spots produced by the fæces of flies were found on the paper. These spots, when examined by the microscope, were found to contain some of the eggs of the *tricocephalus*. Some of the flies themselves were then caught, and their intestines presented large numbers of the ova. Similar experiments with the ova of the *Oxyuris vermicularis* and of the *Tenia solium* afforded corresponding results. Shortly after the flies had some moldy cream—the *Oidium lactis* was found in their fæces. Dr. Grassi mentions an innocuous and yet conclusive experiment that every one can try. Sprinkle a little lycopodium on sweetened water, and afterward examine the fæces and the intestines of the flies: numerous spores will be found. As flies are by no means particular in choosing either a place to feed or a place to defecate, often selecting meat or food for the purpose, a somewhat alarming vision of possible consequences is raised. Dr. Grassi invites the attention of naturalists to the subject, and hopes that some effectual means of destroying flies may be discovered.

THE PROPAGATION OF DISEASE BY BOOKS.—When preventive medicine is searching out and checking all possible means by which infectious and contagious maladies are spread, the part which books may play in the propagation of disease should not be overlooked. There can be no doubt that the specific contagia of many zymotic disorders, and especially of scarlatina, small-pox, and typhoid fever, in the form of particles of material emanations from the bodies of patients, may attach themselves to the covers and pages of books, and so be carried from the sick to the healthy. In private families, all books and periodicals used by a patient during his illness from a zymotic disease had best be burned upon his convalescence. In general hospitals in which zymotic diseases are treated, scrupulous care should be taken that all literature used by patients suffering from contagious and infectious maladies shall be reserved exclusively for use in the special wards devoted to such disorders. We are afraid zymotic diseases are sometimes spread by books through the agency of lending-libraries and second-hand book-shops; and it would be well if the literature of such establishments were occasionally subjected to efficient disinfection. Persons recovering from zymotic disease should remember that it is one of their duties to take all care to avoid their infection of the healthy, and they should be taught to refrain from handing to others the books they have used during their illness.—*British Med. Jour.*

THE HISTOLOGY OF GONORRHOEA.—Professor Hamilton, of Aberdeen, whose profound study of the histological conditions in bronchitis well qualifies him for the task, has been enabled to examine microscopically the condition of the urethra in acute gonorrhœa, opportunities for which must rarely occur. The epithelium of the urethra is disposed, much as in the bronchus, in three strata—the deepest of flat cells, the middle of pear-shaped cells, and the superficial of columnar cells. In acute gonorrhœa the process consists mainly in an exaggerated and irregular proliferation of the deeper strata of cells, the cell-production being so rapid that the discharge contains but few of the fully developed columnar forms. The denudation of the surface in this process explains the scalding pain on micturition. The secretion of the mucous glands is increased, as in bronchial inflammation. There is also considerable corpuscular infiltration of the mucous membrane, leucocytes being accumulated in the sub-epithelial lymphatic spaces; and although there does not exist an elastic basement membrane, which Professor Hamilton believes to prevent the escape of these interstitial products on to the free surface in bronchitis, he doubts either if that occurs here, believing rather that the cellular exudations in the meshes

of the mucosa are carried away by the lymph stream. There was not in this specimen any marked congestion of the blood-vessels; and the trabecular tissue of the penis was not abnormal, unless accumulated leucocytes in the cavernous spaces be so considered. Strictures are produced in chronic urethritis probably by the sub-mucous tissue becoming cirrhotic and contracting upon the lumen, the absence of "fixed joints" indicating the difference in result from chronic bronchitis when the tubes are dilated. The tubules of the testicles and of the epididymis from the same case also showed marked catarrhal inflammation, being filled with *débris* and epithelial cells in all stages of disintegration; but there was no interstitial inflammation whatever. The paper is contained in the current number of the "Practitioner," which is also enriched by a very lucid account of the pathology of dropsy from the editor's pen.—*Lancet*.

THE HAY FEVER ASSOCIATION.—The "Lancet" seems to imagine that this is an association of gentlemen who make a specialty of hay fever, and proceeds to read its members quite a little homily on the inconvenience of such subtle subdivisions of medical study.

THE SANITARY CONFERENCE AT ROME.—All the European powers have signified their adhesion to the proposal of the Italian government to summon a conference at Rome, with the object of making sanitary regulations, and drawing up an international sanitary code. Signor Mancini, Minister for Foreign Affairs, will shortly address a circular to the powers on the subject.—*British Medical Journal*.

ANTISEPTIC FRIGIDITY OF WOUNDS.—The healing of open wounds is said to take place more slowly under the influence of antiseptic dressings. It would seem, according to M. Gosselin, that the antiseptic substances exert an antiphlogistic action on open wounds. In preference to speaking of such an effect as antiphlogistic, M. Gosselin would use a new term—frigidity. By frigidity, then, we are to understand the slowness of reparation and cicatrization of an open wound. In 1879 and 1880 MM. Gosselin and Bergeron showed that antiseptic agents impede the alteration of the blood about wounds, not only by purifying the atmosphere of the germs of putrefaction, but by rendering the extravasated blood less liable to undergo putrefaction. It has been since determined that this change in the blood also takes place within the capillaries, and consists, in fact, in a coagulation of the albuminoid materials. Weak solutions of carbolic acid, alcohol pure and diluted, and camphorated brandy, all give rise to coagulation of the blood in the capillaries, as well as outside the vessels. The circulation is thereby arrested, and this occurs without any vascular contraction. The stronger the antiseptic solution the more rapidly was the circulation arrested. Moreover, Gosselin believes that this limited amount of arrest in the circulation is not accompanied by any gangrene of the tissues.—*Lancet*.

ARMY INTELLIGENCE.—*Official List of Changes of Officers serving in the Medical Department of the United States Army from October 20, 1883, to October 27, 1883.*—BARNETT, RICHARDS, Captain and Assistant Surgeon. Assigned to duty at Columbus Barracks, Columbus, Ohio. Par. 1, S. O. 240, A. G. O., October 20, 1883. — WOLVERTON, WILLIAM D., Major and Surgeon. Granted leave of absence for one month. Par. 6, S. O. 201, Department of the East, October 24, 1883. — MAUS, LOUIS M., Captain and Assistant Surgeon. Assigned to duty at Fort A. Lincoln, Dakota Territory. Par. 4, S. O. 180, Department of Dakota, October 15, 1883. — MOORE, JOHN, Lieutenant-Colonel and Assistant Medical Purveyor. To be relieved from duty as Medical Director, Headquarters Department of the Columbia, to proceed to San Francisco, California, and assume charge of the medical purveying depot in that city. Par. 10, S. O. 243, A. G. O., October 24, 1883. — HORTON, S. M., Major and Surgeon. Leave of absence for one month, with permission to apply for an extension of three months. Par. 6, S. O. 216, Department of the Missouri, October 20, 1883. — MERRILL, J. C., Captain and Assistant Surgeon. Granted leave of absence for one month. Par. 7, S. O. 201, Department of the East, October 24, 1883.

NAVAL INTELLIGENCE.—*Official List of Changes in the Medical Corps of the Navy during the week ending October 27, 1883.*—SURGEON W. K.

VAN REYEN, detached from the Naval Hospital, New York, and ordered to the United States steamer Powhatan. — SURGEON II. M. WELLS, detached from the Naval Laboratory, New York, and ordered to the Naval Hospital, New York. — MEDICAL INSPECTOR A. C. GORGAS' orders modified so that he will be detached from the Naval Hospital, Chelsea, Mass., on December 10th instead of November 10th.

MARINE-HOSPITAL SERVICE.—*Official List of Changes of Stations and Dates of Medical Officers of the United States Marine-Hospital Service, July 1, 1883, to September 30, 1883.*—BAILHACHE, P. H., Surgeon. Detailed as member of board to examine candidates for promotion, August 23, 1883. Detailed as Surgeon-in-charge, Cape Charles Quarantine Station, September 5, 1883. — MILLER, T. W., Surgeon. Granted leave of absence for twenty-five days, August 31, 1883. — WYMAN, WALTER, Surgeon. Detailed as member of board to examine candidates for promotion, August 23, 1883. — LONG, W. H., Surgeon. Granted leave of absence for twenty days, September 25, 1883. — SMITH, HENRY, Surgeon. Directed to take charge of quarantine service at the Capes, July 29, 1883. — STONER, G. W., Passed Assistant Surgeon. Granted leave of absence for thirty days, August 24, 1883. To inspect the relief stations along the coast of Maine, September 29, 1883. — GOLDSBOROUGH, C. B., Passed Assistant Surgeon. Granted leave of absence for thirty days, August 29, 1883. — BANKS, C. E., Assistant Surgeon. Relieved from duty at Portland, Oregon, and to report to the Surgeon-General at Washington, July 10, 1883. — CARMICHAEL, D. A., Assistant Surgeon. Granted leave of absence for ten days, August 31, 1883. — PECKHAM, C. T., Assistant Surgeon. To proceed to Portland, Maine, for temporary duty, August 25, 1883. — DEVAN, S. C., Assistant Surgeon. To proceed to Portland, Oregon, and assume charge of the service, September 11, 1883. — KALLOCH, P. C., Assistant Surgeon. To proceed to Philadelphia, Pa., for temporary duty, July 25, 1883. To rejoin his station, New York, July 31, 1883. — YEMANS, H. W., Assistant Surgeon. Relieved from duty at Sitka, Alaska, and to proceed to Portland, Oregon, for temporary duty, July 10, 1883. To proceed to San Francisco, Cal., reporting for duty to Surgeon Vansant, September 11, 1883. — GLENNAN, A. H., Assistant Surgeon. To remain at Norfolk, Va., until further orders, July 29, 1883. — WADSWORTH, EUGENE, Assistant Surgeon. To proceed to New Orleans, La., for temporary duty, August 2, 1883. To proceed to Mobile, Ala., for temporary duty, August 27, 1883. To rejoin his station (New Orleans) as soon as practicable, September 25, 1883. — *Promotions.*—GUITÉRAS, JOHN, Passed Assistant Surgeon. Promoted and appointed Passed Assistant Surgeon, by the Secretary of the Treasury, from September 1, 1883. August 31, 1883. — WHEELER, W. A., Passed Assistant Surgeon. Promoted and appointed Passed Assistant Surgeon, by the Secretary of the Treasury, from September 1, 1883. August 31, 1883. — *Resignation.*—O'CONNOR, F. J., Assistant Surgeon. Resignation accepted by the Secretary of the Treasury, to take effect August 1, 1883. August 2, 1883. — *Appointment.*—WADSWORTH, EUGENE, M. D., of South Carolina, having passed the examination required by the Regulations, was appointed an Assistant Surgeon by the Secretary of the Treasury, August 2, 1883.

SOCIETY MEETINGS FOR THE COMING WEEK.—*Monday, November 5th:* New York Academy of Sciences (Section in Biology); Medico-Chirurgical Society of German Physicians; Morrisania Medical Society (private); Brooklyn Anatomical and Surgical Society (private); Utica Medical Library Association. *Tuesday, November 6th:* New York Neurological Society; New York Obstetrical Society; Buffalo Medical Association; Elmira Academy of Medicine; Ogdensburg Medical Association; Medical Society of the County of Hudson, N. J. *Wednesday, November 7th:* New York Medico-Legal Society; Medical Society of the County of Richmond, N. Y. (Stapleton). *Thursday, November 8th:* New York Physicians' Mutual Aid Association (annual); Society of Medical Jurisprudence and State Medicine; Public Health Association of New York; Harlem Medical Association (private); Brooklyn Pathological Society. *Friday, November 9th:* Yorkville Medical Association (private); Medical Society of the Town of Saugerties, N. Y. *Saturday, November 10th:* New York Medical and Surgical Society (private).

Lectures and Addresses.

A CLINICAL LECTURE ON
DISEASES OF CHILDREN,

DELIVERED AT THE VIENNA POLIKLINIK,

BY PROFESSOR ALOIS MONTI.

The Treatment of Mild Cases of Scarlet Fever.—Rickets with Laryngismus.—General Remarks on the Phenomena of Rickets.

CASE I.—This child, gentlemen, according to the father's account, has been sick for fifteen days. The illness began with vomiting and sleeplessness, and then a redness of the skin was noticed all over the body. You observe on the hands the characteristic desquamation which can only result from scarlatina. When you examine the skin, you find that it is unusually dry and sealy. Hence we have scarlatina in the desquamative stage, and this has evidently been a simple case, with no great disturbance of the general system.

What is to be done in such a case? In the first place, it is of the highest importance to examine the urine, as renal complications occur during the third week of the disease. I shall have it done in this instance. This child must go to bed and stay there, taking no food except soups and milk. Such patients should be carefully isolated. If there are other healthy children in the house, they should not be allowed to attend school, but must be kept at home and closely observed. As regards medication, I would insist that there is no specific treatment. You may give whatever you please, it makes no difference with the course of the disease. *Attend strictly to the diet, as this is of vital importance.* In light cases, renal complications *never* occur when the diet is properly regulated. Medication does not affect the fever, but, as long as it is present, give nothing but soup and milk.

Examine the urine daily, and as long as it remains cloudy, even if no albumin is present, give no solid food. No meat should be allowed before the fourth week. It has been my experience that all children who take solid food too soon have renal complications, as shown by the appearance of albuminuria, dropsy, etc. After the fourth week this danger is past. The ordinary idea that the use of cold baths, or the so-called "taking cold" from the patient's getting up too soon, is the cause of kidney trouble after scarlatina is erroneous. It is only caused by the premature use of a meat diet. If there is albumin in the urine, keep the patient in bed up to the fourth week. When may you give baths? At any stage. They have no deleterious influence on the kidneys. The only point is not to give them too warm—above 26° – 27° C. [= 78.8° – 80.6° Fahr.].

In regard to medicines: In simple cases give nothing; distilled water is as good as anything. But, as you must give something in your private practice, dilute phosphoric acid or carbonic-acid water may be used. This is the only treatment. You will *never* see dropsy in simple cases under this treatment. This child's urine has now been examined,

and found to be normal. The treatment, in short, will be: Keep him in bed, and give nothing but soup and milk.

CASE II.—I spoke yesterday of the rachitic changes to be noticed in the skull. In the thorax you will notice enlargement of the heads of the ribs, increased width of the sternum, and, subsequently, sinking in of the thorax on each side, giving rise to the so-called "pigeon-breast." In this infant the process is only just beginning. You can feel the heads of the ribs, which are slightly enlarged. The ribs are curved on one side more than on the other. The vertebræ are normal, but the head shows rachitic changes clearly. The mother says that the child has spasm of the glottis at night. Now, this spasm is a symptom of several diseases, but is *not* a disease itself. It bears an intimate relation to rickets, and, according as the latter disease progresses or comes to a stand-still, the laryngeal spasms increase or diminish in frequency. Thus, in Vienna, when autumn comes and the child is obliged to be in the house a good deal, the rachitic processes advance more rapidly, and with them the tendency to laryngismus. In summer, on the contrary, when the child is much in the open air, the disease is arrested. This alternation may continue for two or three years. The cause of this laryngeal spasm in rickets has never been ascertained. Some observers maintain that it is due to peripheral irritation in the nervous system; others have sought for an explanation in the possible cerebral changes which may accompany cranio-tabes.

There is no treatment for this laryngeal trouble aside from an anti-rachitic treatment. Regulate the diet. Give milk and soup, and meat if the child is old enough. Cod-liver oil is the most important remedy. I would prescribe in this case:

R.	Ol. morrhue,	10.00
	Pulv. acacie,	
	Aq. destil., aa, q. s. ad	100.00
	Tinet. valerianæ,	2.00

M.

Sig. Three teaspoonfuls three times a day.

Give the child a salt bath at least three times a week. When a spasm occurs, open the window and give the patient air. It is a good plan also to sprinkle cold water on the abdomen. By seizing the tongue with two fingers and pulling it forward, we elevate the larynx, and thus stop the attack.

CASE III.—This child, the mother says, suffers from cough and dyspnoea. The temperature of the skin is evidently elevated. On examination, we see that this is a beautiful example of rickets affecting the entire skeleton. The thorax is short, with a well-marked "rosary"; there is a slight angular curvature of the spine. Even the clavicles, you see, are bent. Feel of the scapulæ; they are abnormally thickened. There are characteristic epiphyseal swellings on the extremities. Notice the pelvis, how small and narrow it is. The child is five years old, and yet he is not larger than one of two years. On standing him up, see how peculiarly the pelvis slants forward. The trochanters are unusually prominent. The thighs bend outward; hence the knees are thrown inward (genu valgum), and a result-

ing forward curve appears in the tibiae, in consequence of which he has flat-foot. All of these changes result in regular sequence from the pelvic deformity. The arms are, in like manner, bent and distorted; in fact, there is hardly a bone in the whole body which remains unaltered. As a result of the disease, the child is thin and badly nourished. The abdomen is prominent. On examining the throat, we find that the neck is larger than normal, and that a catarrh is present.

In connection with this case I should like to speak a little further of the symptoms of rachitis, of which you have seen such a good example. As a result of the thoracic changes, the lungs themselves may be affected. Rachitic children are very prone to catarrh and pneumonia. If the rachitis ceases to advance, the pulmonary symptoms may disappear; but, if the disease continues, the pneumonic centers become cheesy. In every case there is enlargement of the spleen, varying in extent with the progress of the disease. Examination of the blood shows nothing unusual, though in some cases leucocytosis may develop. The urine is generally of low specific gravity, the phosphates are frequently in excess, and I have found lactic acid, but not often. The most important systemic disturbances are those in the alimentary organs. The appetite is poor, with dyspepsia, gastric pain, and vomiting. The stools are irregular, sometimes loose, and sometimes the contrary. Analysis of the feces shows an excess of lime.

Meteorism is a constant accompaniment of the digestive troubles. So long as the latter continue, we may be sure that the rachitis is progressing. Notice carefully the general condition of the child's nutrition, and let him be weighed at regular intervals. Lay it down as a cardinal rule that, as long as the patient wastes, the disease must be advancing. Fever has been stated to be a symptom of progressing rachitis. I have often noticed it in such cases, but it has always been due to some complication, not to the affection itself.

As regards the course of the disease, I would say that it begins in the head or thorax, and may either be limited to one of those regions or affect the entire skeleton, as in the case which you have seen. It is important to be able to tell in a certain case just when the changes began. During the first few weeks of infancy the head is first affected; at three or four months, the thorax; between the ages of two and three years, the long bones begin to show evidences of rachitis. The time of the normal growth and development of the bones determines the time at which they may be affected. From this you will see that it is important to notice whether the head alone is involved, or several of the bones.

BLEACHED SPONGES.—It is quite commonly supposed that the bleached sponges which can be seen at nearly every street corner in the baskets of itinerant venders have done service at some one of the hospitals, and have been cleansed and bleached to supply the demand of those who prefer a cheap article. Although this impression is probably an erroneous one, the public should nevertheless avoid using, for bathing purposes, sponges that have been "chemically treated" in order to render them white, as instances have been reported of serious inflammation of the eyes caused by their use.

Original Communications.

THE IMPORTANCE OF CLEANLINESS IN SURGICAL OPERATIONS.*

By R. STANSBURY SUTTON, A. M., M. D.,
PITTSBURG, PA.

In years prior to 1838 no germ theory of disease existed. It has had its growth within the present generation, and is far from fully developed at the present time. Earlier surgeons did not annoy themselves with visions of bacteria-clouds and micrococci-colonies. Legs were amputated, arteries tied, bones exsected and resected. Many died of infection, many survived. That the statistics in reference to this matter have improved with the growth of the germ theory, and the practice of the antiseptic system, there can be no reasonable doubt. But, while modern surgeons have attained better results, it is entirely probable that the germ theory is, in some respects, badly understood, and that our application of chemicals for the destruction of bacteria and micrococci is too wholesale, and often more detrimental to the wounds and the patients than the germs they are supposed to destroy would be.

In times gone by, a great amount of dirty and careless surgery was followed by good results—a proof of itself that all matter out of place, which we call dirt, was not a poison to the wounds inflicted. What is ordinarily termed dirt may or may not be pernicious. It may even be antiseptic. In proof of this, we have antiseptic soils, as, for instance, the peat so often now used for surgical dressings. And it is a fact that in this city of Pittsburg the dirtiest portions are the most exempt from epidemics of infectious diseases. It would appear that we lack discrimination in reference to this matter of what is and what is not really dirt. Many have attached too much importance to the microscopic inhabitants of our world; and some even argue as if the Almighty had put us on the earth for the express purpose of destroying bacteria in our lungs and stomachs, and of being in turn destroyed by them. In short, they have gone wild on the subject, and are only now learning that many, and, indeed, nearly all of these little organisms are innoxious; that only some varieties are malign.

Much is being learned; and, while the germ theory of disease is in the main correct, we shall ere long better understand how to apply it to practice in surgery, and know better where and what to combat. Some germs are dangerous, some are not. In late years I have known two doctors to grow very ill after cutting their corns. One was a regular, the other a homœopathic doctor. The former died, the latter survived. Both had cut their corns with a dirty knife. Pus was the element which had dried upon the blade, and begat a bacterium that did the business for one, and nearly for the other. When the old surgeons cut open an abscess, wiped off the knife upon a towel, then gave the knife a rub or two over the leg of their pantaloons before putting it away, this was considered pretty clean work. But, if the

* Read before the American Academy of Medicine, October 10, 1883.

next fellow, who had a boil opened with that knife, died, death from natural causes was the verdict, and the comment followed that all surgical operations were "ticklish things." It was not the pus on the knife that poisoned these doctors; it was the germs of bacteria lying dry there, and which were planted in a soil suitable for their development. They had developed in the pus, and were ready for planting. Pus injected directly into the blood-vessels has by Chauveau been proved incapable of producing pyæmia when the pus is fresh or so-called healthy pus. Virchow substantiates this view in proving that pyæmia is not thus produced.

The pus must contain something else—a poisonous germ or element. It grows from exposure of the pus to the air, and possibly from other conditions.

One day I saw Lawson Tait open a belly, seize a Fallopian tube full of pus, and, in trying to draw it out of the wound in the belly-wall, the sac ruptured, and the pus ran over the woman's intestines and trickled away down into her belly. I drew a long breath; the idea that the woman would soon develop a peritonitis was in my mind. She didn't do anything of the kind; she got well, and did it in good style. That "something"—that bacterium or villainous micrococcus—wasn't in that pus. One drop—yes, one one hundredth of a drop—of some pus in that woman's belly would have killed her. All fluids are not noxious, even if purulent; all germs are not malign. Besides, all the germs fatal to one animal may be innoxious to another. This has been well established. A few years ago, while on a shooting expedition, I fell in with an intelligent fellow whose profession was spaying hogs and cattle. He had done one thousand ovariectomies among hogs with scarcely any loss. I learned that he was going to operate, at the farm I was staying at, the next day. I postponed my morning hunt and observed him.

The hogs were put into a dirty pen, caught one by one, and held on the side. The fellow's hands were dirty, his tools no better, his ligatures ditto. He cut the hogs, took out the ovaries and tubes, *à la* Lawson Tait, put one stitch in the wound at its middle, and turned the hogs loose in the dirty barn-yard. I was there for some days later. Those hogs all did well. Had they been human subjects, they would certainly all have died. Living tissues combat noxious germs and destroy them. More is this the case in some animals than in others. Lister believed in noxious germs, and originated much of the so-called antiseptic method. Through it surgery has shown better results, and it is quite possible, almost proved, that the cleanliness insured by the method is all that is in it. While this is true, it does not follow that germicides will not yet be found better than carbolic acid, etc., and free from the objections now pertaining to some—that of being poisonous to our patients. We are told that the alimentary canal is full of bacteria, that often a large proportion of the faecal matter consists of bacteria alone. In London I saw Mr. Allingham doing many operations in the rectum. He used no carbolic acid or other germicide. I said to him: "Do you do operations at the opening of a sewer without antiseptic precautions?" "Yes," he replied, "and the wounds do very well. Somehow or other the intestinal variety don't injure the wounds."

So we are told that these bacteria infest all the openings of the body. The dentists don't seem to be much troubled about them. Their tooth pulling is rarely followed by trouble. All germs are not malignant, and the great probability is that very few germs are. These latter we must look out for, and, to make ourselves safe, we must wage war against all germs. If a surgeon ignores all cleanliness he will come to grief; but, if he is clean in every detail, carbolic acid will not likely do much for him, unless he operates in the pus-soaked wards of some old hospital, where he had better adhere closely to Listerism, spray and all. Carbolic acid is not a reliable germicide, and sometimes poisons the patient. Iodoform is a good germicide, but also a poison.

Bichloride of mercury will kill bacteria when diluted to the extent of one part of the salt to 330,000 parts of water. It is the coming agony on this subject. We shall see. Yet something for spray must be found; carbolic acid is of no use, water is just as effective as a germicide, for no bacteria are killed, in the short time a spray is playing, by a five-per-cent. solution of carbolic acid. Wet germs stick to the surface they lie on; therefore wet the floor and the walls, and, if you like, wet the air, with a spray of water or carbolized water, but keep it off the wound. It is good for nothing. Spray has had its day; irrigation with carbolized water will stand much longer. The carbolic-acid (a three-per-cent. solution) water, if it stands made for a few days, may be depended upon for purity, and a stream running through a wound will cleanse it, lessen bleeding, and make it easier to operate. But the water must be from twenty-four to forty-eight hours old, or it may contain living bacteria, and spores may live in it for a week. Iodoform is a more reliable germicide, but it is very poisonous, and must be carefully handled inside of the belly.

What precautions should we observe independent of chemicals in surgical operations? The place of operation should be free from carpet and curtains and upholstered furniture. The floor should be well scrubbed, the walls also, and both should be wet at the time of operation. No dust can therefore be disseminated through the room. The patient should be scrupulously clean as to clothing and covers. The parts to be operated upon should be well scrubbed with soap and water, and shaved with a clean razor. Towels wrung out of boiling water should be laid about the area surrounding the part. Thus the place for the wound and surroundings are rendered aseptic.

The operator, assistants, and nurses should wear clothing free from blood-stains or splashes of pus, and which has never been worn about infectious cases of disease. They should cut and clean their nails, and scrub their hands and arms with soap and water and dry them upon clean towels. The instruments to be used should have been scrupulously cleaned with turpentine or alcohol, then with soap and water, and should lie in pans which were filled with boiling water sufficiently high to immerse all. The water will cool sufficiently to proceed by the time all is ready.

The ligatures should also be scalded in the same manner, and used directly from the bath. No one but the operator should handle the instruments if possible, and they

should not, during the operation, become scattered about. The sponges, when used, should be prepared, if not new, after the manner of Mr. Tait, or Dr. Keith, or others, and may lie submerged in water, sufficiently cool after boiling, in which carbolic acid is dissolved or not, as the operator may fancy. They should pass through as few hands as possible on their way to and from the wound. Before closing any wound it should be free from all clots, and oozing should have ceased, or nearly so. If in the abdomen, every vestige of bloody fluid should be sponged out, and, if there is a suspicion of further oozing, a drainage-tube of glass should be left in the lower angle of the wound, extending into the retro-uterine cavity. All suspicious bleeding points in a wound should be twisted, or sponged with hot water, or caught with a pair of hæmostatic forceps for a minute or two before the wound is finally closed.

After closure, if no tube is left, the iodoform gauze or cotton dressing is preferable to carbolic acid. But, if a tube is left, I would prefer carbolic gauze well saturated with a fresh five-per-cent. solution of carbolic acid in glycerin. The drainage-tube should pass through a rubber apron and be closed with a carbolized cup-shaped sponge, over which the rubber apron should be neatly folded. A binder may secure all. Care must be taken to use a scrupulously clean catheter to empty the drainage-tube, and it should be kept immersed in a strong solution of carbolic acid until needed. In subsequent dressings, sponges are better laid away. Small pledgets of carbolized or salicylated cotton and clean dressing forceps will cleanse the edges of all discharges, if any occur. These are burned after use. Should the wound require stimulation, an alcoholic lotion of thymol, or eucalyptol, or glycerin and water, will be found efficient, and is best applied with the cotton mop. Washing of the wound when not required is a source of danger, though doubtlessly greatly magnified. If the carbolic acid has failed, and if all germs are not noxious, it does not follow that we shall not yet mend the method and yet gain by it. In the mean time let us be clean and trust nothing, and we shall be better off than we were before Mr. Lister roused us all up in this matter.

THE PATHOLOGY OF ACUTE LOBAR PNEUMONIA

FROM A NEW STANDPOINT.

By WILLIAM D. SCHUYLER, M. D.

Fourth Article.

An Outline Scheme of the Developing Local Process.—The Rationale of the Process.

(Concluded from page 490.)

The inference to be derived from the limitation and possible size or very small holding capacity of a single receiving space into which exudation is poured is, that when exudation begins to form in one of them, it must almost immediately fill it, especially as this exudation, as we have seen, occurs under and from pressure. And for an equal reason the consequent effects to be noticed hereafter must occur with like rapidity. Furthermore, as we may infer

from the comparison of strength and possible resistance, already given, when exudation begins, the process of consolidation, in a general sense an entire consolidation, may be, as it frequently is, rapid and quickly completed.

I may say that it is mainly by the aggregate action of the immense numbers of separate consolidations, "pneumonic granules," within its structure that the lung involved is solidified and distended. Some distending action, however, may result from developing epithelium. As this source of development and distension is not noticed by some pathologists, and as it occurs late in the process in yellow consolidation, when exudation proper is complete, such effects must be slight and unimportant in comparison to those of the essential pneumonic exudate.

In order to appreciate all of the effects of exudation, it is important to bear in mind or understand (1) that it is derived from the blood in the branches of the pulmonary artery (Flint); and (2) that it is comprised of elements of the blood. That the pneumonic exudation is blood, probably somewhat altered relatively by pressure and the straining process to which it has been subjected, also by having been obstructed nutritively, will be apparent, first, by its behavior and course—including its immediate solidification by coagulation, its early and rapid degeneration, liquefaction, and subsequent complete removal, in which (course) it exactly resembles that of blood when from any cause that fluid becomes extra-vascular; second, that it is blood is further, and I may say conclusively, shown under histological considerations of morbid anatomy, given in a subsequent chapter, already referred to, the support therein being mainly derived from authorities cited.

The several results of exudation as it escapes from the vessels, and is received, retained, and solidified, in an extra-capillary, terminal air-space, are, 1, a filling of this very small cavity until it is distended to its utmost capacity; 2, the formation, *pari passu*, of pressure within this space and upon its walls, notably of lateral pressure upon the vessels, in the alveolar walls and in the alveolar septa; and, 3, the depletion of the systemic blood in volume equal to the quantity of the exudate.

a. The general gross aggregate of these effects is as follows: Of the multiplied formation of the individual coagulates, 1, the solidification of the lung structure, as stated. As a single coagulate distends an individual space, so the aggregate structurally, and, as we shall see, completely, distends the organ throughout the area of the process and constitutes the consolidation of the pathology. 2. Of lateral pressure upon the vessels (owing to the amount of the exudate, its immediate coagulation, and the small holding capacity of the alveolar space), there results, first, their support against further distension and possible rupture; second, as the coagula grow, they compress the distorted, varicose vessels back into normal outlines and position; and, thirdly, by the pressure and counter-pressure of their continuing complete formation they cause the complete closure of the capillaries involved. This general closure of the capillaries throughout the area involved by the process is rendered readily probable by the delicacy of their walls and a consequent inability of the vessels themselves to offer resistance

also by the readiness with which their previous blood contents is evacuated. At the moment exudation begins, in the stage of engorgement, the involved capillaries are congested, filled to their extreme limit of distension, as will be shown later, with obstructed blood. Before the exudate can compress these vessels, or *pari passu*, their contents must be discharged. This discharge is accomplished partly by exudation itself and partly by displacement, the contents by the latter method being moved forward into the efferent vessels by the lateral pressure of the exudate. Evacuation by exudation is direct, and calls for no explanation; and, by displacement, is readily accomplished, for two reasons, namely: 1, because the congesting, obstructed, intra-vascular blood does not coagulate; and, 2, because the internal capillary coat is unimpaired by the process. For which reasons its evacuation by a forward movement is readily accomplished, especially by a properly applied, and, as pointed out, a developed external, lateral force.

That this blood does not coagulate we have among others the evidence of Delafield ("Studies in Path. Anat.," New York, 1882), who says: "In earlier stages of red hepatization. . . although the blood-vessels are full of blood, it is not coagulated." Also that it is readily displaced throughout is evident from the well-known and often verified fact that the vessels of the pneumonic lung may, with no considerable effort, be injected with an artificial preparation post mortem, death occurring at any stage of the process. Furthermore, the readiness and ease with which these vessels may be injected demonstrates the second point claimed—that the intima, their internal coat, is uninjured structurally throughout, and that their structural potency is preserved to the end. This latter fact is of interest in connection with the teaching that in croupous pneumonia, the acute lobar we are studying, the involved capillaries are closed, destroyed, by an intra-vascular, endothelial, inflammatory cell proliferation, and are subsequently reformed (Heitzmann), and must conclusively negative such a result.

The contents of these capillaries being readily removable, as shown; that the resulting lateral pressure of the exudate, aided by exudation direct as an action, is adequate to cause their evacuation is evident (1) from the anæmia which exists, as we shall see (study of morbid anatomy), throughout the period of complete consolidation; (2) from the obstruction to general circulation which exists at this time during consolidation, and (3) from the degree of intra-organic distension, and hence pressure, to which the lung is subjected by an acute pneumonic solidification, which distension is said by some to equal a full inspiration. By others (Aitken, Wilson Fox), the organ has been found so swollen, distended, as to entirely fill the costal cavity, as shown by exhibiting the marks of the ribs when removed from the chest.

The probability of a simple, mechanical, non-inflammatory closure of these capillaries by the resulting pressure of the forming and solid exudate is evident, partly from the fact that obstruction exists while consolidation is perfect, and partly, furthermore, by the additional fact that it is relieved when softening of the consolidate, in the course of its degeneration, reaches a point at which pressure ceases

to be adequate to shut out a further passage of the blood, which, as we shall see, occurs just prior to the crisis of the process or of its resolution. The phenomenon of this renewal of the circulation could scarcely be attributed to a possible vascular reformation. That a capillary structure so extensive as becomes implicated and closed in acute lobar pneumonia is destroyed by inflammatory action and again renewed (according to the author of this theory, to wit: "a great many capillaries are destroyed, for the nearer the process approaches to gray hepatization the fewer are the capillaries to be seen in the alveolar walls."—Heitzmann, "Microscopic Morphology in Health and Disease. Croupous Pneumonia," pp. 719)—especially at the time reconstruction must occur, if at all, about the period of crisis, when many subjects who ultimately recover are quite moribund from asthenia, and others are too feeble from age to support such an extensive reformation of vascular structure, especially through a region practically tied up by the consolidate and by its pressure, and, therefore, most feebly supplied with imperfectly oxygenated blood—is scarcely possible. It is much easier to believe that the vessels "which can not be seen in the alveolar walls in complete gray consolidation" are simply closed by pressure; especially as the course of the exudate, its effects by development and softening, quite conclusively account for the *pari passu* phenomena of circulation. That anæmia exists during complete consolidation will be shown farther on, and that such a state is due to pressure is conclusively evident.

b. The general vascular effects due to exudation in this process are most important as regards the conservative character already claimed for it. They are (1) depletion of the volume of the systemic blood in amount equal to the entire weight of the exudate, including that which is expectorated and retained—the latter forming the consolidate; and (2) the restoration of an equalized and non-injurious, non-pathological blood pressure throughout the systemic and pulmonary vessels.

The importance of the effect of depletion as a conservative action will be appreciated only when we consider the relative amount of the entire blood thus lost, as estimated in the manner above stated. The weight of the expectorated exudate I do not find to have been computed. While expectoration varies greatly, in many cases it amounts to half a pint, a pint, or even more. Add this quantity, however, to the weight of the consolidated exudate, which has been estimated by comparing, with due precaution, the weight of the consolidated with the unaffected lung, and found to amount anywhere up to two pounds if a single lobe is affected, and to four or even five pounds when an entire lung has been involved (Flint, Styles, Grisolle), and the total loss must amount to from one sixth to one third the entire amount in the body.

Considering, furthermore, that the nutritive functions are quite inhibited, as we have seen, while obstruction is present, and that therefore little increase or renewal of the vital fluid can arise from this source, the proportionally large amount of depletion which takes place can but have a markedly inhibiting effect upon the process in progress. The conservative action of this great depletion is manifest

throughout the second effect noted—namely, that of restoring an equalized blood pressure throughout the systemic and pulmonary circuit; and especially as annulling the local afferent pulmonary morbid fullness and pressure which developed on account of the obstruction resulting while the blood volume was greater than could readily pass through the functionally diminished pulmonary capillaries.

It has been set forth that the development and extension of the pneumonic process depend upon and are the result of (1), and directly, a created capillary insufficiency more or less limited or extended; and (2) a consequent resulting, abnormal and greatly and *rapidly* increased intra-vascular local afferent blood pressure, which creates a further and extending capillary insufficiency, and is the important cause of the process, or, more especially, of its extent as it is subsequently developed. I may state here that, could the circulating blood be withheld from entering and aggregating in the insufficient capillaries as a result of their atony, and approximate pressure thereby be prevented, there would *not* result a pneumonic process; the affected capillaries would soon recover their tone, and no inconvenience would be felt. As a suggestion, I question whether under some conditions of temporary debility and low blood pressure such an occurrence may and does not take place.

But a process once developed through pressure, by the depletion which results from exudation, the blood volume, which makes pressure possible, is naturally reduced until the diminished remainder can and does pass the uncomplicated and available pulmonary vessels without stress or delay. In which way and by which process that which could not be anticipated and prevented—the occurrence of a resulting morbid intra-capillary blood pressure immediately following the initial lesion—is now accomplished through exudation and the completion of the necessary supporting anatomical process, and it renders a further extension or consolidation impossible. Excepting from some added cause an extension of the primary lesion—viz., the creation of a more extended capillary functional insufficiency—occurs, when a further like consolidation may result or not, according to the resulting disturbance of pressure which may be possible and is created.

c. A description of the local vascular effects, noticed as the third division of the results of exudation, has been anticipated in the foregoing. They are, (1) in regard to the involved, affected atonic and distended capillaries, their support, restoration to normal outlines, and, later, their complete closure; (2) in a general pulmonary sense, the consolidation and distension of the involved structure, with a resulting intra-organic pressure; (3) the creation of a consequent anæmic condition throughout the region consolidated; (4) cessation of the action of morbid development; and, (5) except in a histological sense, a repose of the organ as anatomically involved.

SYPHILIS IN THE TROPICS.—At the recent meeting of the International Congress of Colonial Physicians, held at Amsterdam, M. Catrin, of the medical corps of the French army, dwelt upon the special severity of tertiary syphilis in hot climates. In 152 cases there were 52 of perforation of the palate. In general, he thought syphilis was most severe where malaria was most intense.

ON THE SO-CALLED EQUINE SCARLATINA.

By FRANK S. BILLINGS, VET. SURG.,
BOSTON.

I HAVE been asked to write a paper on this disease. *There is no such disease.* It has been, and is still, the misfortune of veterinary medicine to be a sort of tail attached to human medicine, a parasite which depends on the latter for strength and support. In the early days of veterinary medicine the nomenclature of the human branch was transferred without reflection to the diseases of animals, as the micro-pathological anatomy of the organs of man has been, and is to-day.

Then we have the “measles” of the hog. Who would for a moment think this was not measles at all, but a cysticercus invasion? We speak of “hog cholera,” which bears no relation to the human disease; of the “typhus” of various animals, when nothing resembling the typhus of man, in its peculiar microscopical phenomena, has ever been seen. “Typhoidal” phenomena are common enough in all species of animals, but not those peculiar to typhus.

Veterinary pathologists (we never had one—though many books have been written, we never have yet had a logical, skeptical thinker, as a writer on pathology in veterinary medicine) have yet to learn what constitutes the essentials that should give an animal disease the same name which it occupies in human nosology. To give an animal disease the same name attached to a human disease which it resembles, it must have:

1. The same cause, and be equally transmissible between man and this animal species.
2. Having the same cause, its genus must be similar.
3. The principal points of its pathological anatomy must be similar.
4. It must be similar in course and termination.

These may not be all the points of resemblance, but they are the cardinal ones, and are only slightly modified by the varieties of constitution, anatomical structure of parts, etc. For instance, pneumonia is pneumonia wherever you find it, and so of every organic disease, and in general we have pretty nearly the same varieties in animals as appear in man; but it is singular that the different varieties which occur, under varying circumstances, in man never appear in the same course in our animals, viz.: Broncho-pneumonia is the rule in the horse, cheesy pneumonia in cattle, and catarrhal pneumonia in the dog.

As to “scarlatina,” to be such in fact, the first necessity would be that it was transmissible in some way from man to the horse, and *vice versa*. This is not the case. It has not one characteristic in common with the disease in man, except that there is a cutaneous eruption. The name has been entirely dropped from *all* the modern continental works on zoopathology, and *never* appears in any of the medical periodicals, except those of English origin.

What is known as “scarlatina” is either a condition following on the “influenza diseases,” or a new malarial complication due to some new contagium, which the anticipating disease had prepared the way for. It is nothing but a

modified form of what is known as "purpura" in English veterinary works, and occurs under exactly the same conditions.

My exact meaning will become clearer to medical readers if I quote from Williams, the best English author. He says: *

"A febrile disease, characterized by an eruption of the skin, petechial spots on the nose, soreness of the throat, and sometimes suppuration in different parts of the body, particularly the submaxillary space."

"Unlike the scarlatina which attacks man, it is a non-contagious disease, generally attacking but one or two horses in a large stud, among which some form of epizootic disease is at the time prevalent."

"Scarlatina is usually associated with epizootic catarrh, and occurs in animals that have been for some days suffering from that disease; and the production of such an alteration in the blood as induces the scarlatina is due to defective ventilation or stable drainage, or to overcrowding, by which the air becomes loaded with decomposing animal matter. Sometimes a weak constitution will convert a catarrh into scarlatina, and the severity of an epizootic disease may alter the blood and give origin to scarlatina."

This is from an author who has been called a "world-renowned pathologist." If it is pathology, if there is a grain of logical sense in it, except that the condition the author calls a disease comes as a sequel of something else, then I do not know the use of language.

The A B C of zoopathology has yet to be written.

Clinical Reports.

NEW YORK HOSPITAL.

CLINICAL REMARKS BY ROBERT F. WEIR, M. D.

October 20, 1883.

Two Cases of Internal Urethrotomy.

GENTLEMEN: The patient before you is a seaman, forty-eight years of age, who contracted his first gonorrhœa thirty years ago. Eighteen years ago he sustained an injury of the hip and an internal injury causing bloody urine. A physician at that time told him he would be obliged in the future occasionally to pass an instrument through the urethra. Hence it may be inferred that the urethra was lacerated to some extent. Three years afterward he was operated upon by external urethrotomy, and was given an instrument which he was told to pass. This he did for a time, and then, as usual with such patients, neglected it. He is positive the size of the instrument was No. 10 English. Finally, about six months ago, a No. 6 was the largest that he was able to pass. Then further neglect on his part took place, and subsequently more or less complete retention occurred several times. At present I find a stricture three inches from the meatus, admitting a No. 6 French—a stricture which has not yet been operated upon; and at the site of the old stricture, now recontracted, is another narrowing. The scar of the operation is seen in the perinæum. Now, you might suppose that when external urethrotomy was done, the entire depth of the urethral

wall, and, of course, of the strictured portion, being divided, recontraction would not take place; and, as a rule, up to a certain limit, that limit being the normal size of the urethral canal, the more thorough the division the less likely is recontraction to take place, or at least to take place so soon. Division up to the normal size—sufficient to admit No. 32 French will do, as a rule—is as effectual by internal as by external urethrotomy, and it is much safer. Statistics show that dilatation is but little safer than internal urethrotomy, and, as the latter gives more permanent and quicker results, I shall resort to it on this occasion. I have some specimens here showing the small amount of spongy tissue in the upper as compared with the lower wall of the urethra. You will see that the resistance to the cutting blade due to the firmness of the fibrous bands is much greater at the lower than at the upper stricture, from the fact of its traumatic origin. The division is effected with Maisonneuve's urethrotome, and afterward the front stricture, which has not yielded sufficiently, is enlarged with Otis's instrument.

In the case of the second patient, who contracted his first gonorrhœa eighteen years ago, the stricture is situated about four inches from the meatus, and admits a No. 12 French *bougie à boule*. There is no deeper stricture. I call your attention to a little point shown in the examination—the peculiar appearance of the oil injected after it has become mixed with the mucus of the canal; it looks very much like the secretion of a chronic gleet, and might lead one to a false diagnosis. The stricture is now divided, first with Maisonneuve's and then with Otis's urethrotome. The latter was too large for introduction at first. Should hæmorrhage occur, it can be controlled in the anterior portion of the canal by a bandage wrapped snugly about the penis; in the peno-scrotal portion, or in the perinæum, by pressure exerted upon a perineal pad by a rubber bandage attached to a belly-piece.

Both of the patients will receive an eighth of a grain of morphine every two hours and five drops of the tincture of aconite the first day, the further administration of these drugs to depend on whether or not a chill attends the passage of the urine. Sounds will not be passed for two or three days, and then only if the temperature of the body is normal, after which they must be used regularly—at first by the surgeon, and finally by the patient.

Book Notices.

Seasickness: its Cause, Nature, and Prevention without Medicine or Change in Diet. A Scientific and Practical Solution of the Problem. By WILLIAM H. HUDSON. Boston: S. E. Cassino & Co., 1883. Pp. 147.

Of all recent contributions to literature with which we are acquainted, "English as She is Spoke" is the one most vividly brought to our mind by this coruscation of scientific light. In laudable ambition, in the temerity born of conscious fitness to execute and accomplish, and in general self-complacence, the authors of these two little books are one.

We feel that the interests of Mr. Hudson and our readers will best be served by a few *morceaux* taken from the index of this remarkable *pot pourri*.

A.

Author's musings over his wrongs.

Author's constitution, always sick.

Author's motive in this book.

Adapt themselves, the first class on the ocean.

Absurdity of heavy feet.

* "Principles and Practice," p. 308,

B.
Brain-sick man of the land improved.
C.
Crime not to understand seasickness.
Chance of escape, Gravity allows a.
Controlled, Seasickness has always.
Confirmed by.
Confidence absurd.

D.
Discovery of this knowledge.
Discouraged, None should be.

E.
Exaggeration of the sailor.
Of the sailor, why he does so.
Envy, A big dose taken by the author.
Experience of author.
Of author by day.

F.
Friendly power, Gravity is a.
II.
Heavy feet, how produced.
Their use.
How changed to light.

I.
Ignorance has odor of crime.
Ignorance of the author.

J.
Jungle, Seasickness a perfect.

L.
Lofty building, dizzy. No cessation.
P.
Palliation, It is not, to call it no disease.

R.
Rocking-chair, a thing to know.

S.
Stubborn facts, not elegant diction.

Physiological Cruelty; or, Fact v. Fancy. An Inquiry into the Vivisection Question. By PHILANTHROPOS. New York: John Wiley & Sons, 1883. Pp. vi-156. [Price, \$1.25.]

THE unusual impartiality and evident conscientiousness of this inquiry ought to forward in a measurable degree the clearing of the turbid vivisection question. Previous arguments, either for or against experiments upon living animals, appear to us to have been nugatory, mainly for want of that sympathetic appreciation of opponents' motives which is essential to the adjustment of differences of sentiment.

Although "Philanthropos" is by tacit confession a working physiologist, the claims of the anti-vivisectionist to a respectful and even deferential hearing have never before been as generously and feelingly recognized by one so successful in placing the advocate for regulated experiment in an absolutely unassailable position. But, while we very willingly make this acknowledgment, we yet feel that "Philanthropos's" altruism needs extension. The able chapter on "Our Rights over Animals" we would gladly have seen supplemented by a longer chapter on *The Rights of Animals to our Sympathy and Protection*. The oneness of nature, the common brotherhood, not only of men, but of all living things, which is the most resplendent discovery of modern science, urges upon us, with an impassioned argument more forcible than untutored sentiment, to admit the right of life to continue, and the claims of sentience to our tenderness. The highest gift of man is not his fortuitous supremacy in the order of organic nature, but what is literally its appanage—a proper sense of the responsibilities of that supremacy.

Under the heading, What is Pain? the physical basis of this subjective state is interestingly and instructively illustrated, and the question is considered from an aspect commonly ignored by anti-vivisectionists—the relation of pain to complexity of nerv-

ous organization. The question, What is Cruelty? is answered from a cognate stand-point. The infliction of pain is justifiable or unjustifiable according to circumstances. "Pain given for the good of the individual itself may be unjustifiable *if the good to be obtained is not sufficient.*" And "long life, mental and bodily activity and health, are benefits which in quality more than balance the evil of pain." Succeeding chapters are occupied with "The Relation of Experiment to Physiology," "The Relation of Medicine to Experiment," "Legislation: Past, Present, and Possible," and there are forty-four pages of appendices.

Those who would be fortified, not only with the facts, but the logic of this subject, or dispossessed of unreasoned feeling against vivisection, should turn to the work of this singularly competent writer.

On the Treatment of Wounds and Fractures. Clinical Lectures by SAMPSON GAMGEE, F.R.S.E., Consulting Surgeon to the Queen's Hospital, Birmingham, etc. With Forty-four Engravings on Wood. Second Edition. Philadelphia: P. Blakiston, Son & Co., 1883. Pp. ix-364. [Price, \$3.50.]

IN these days of cheap medical literature it is actually a relief to the eye to see a book handsomely printed on thick paper with wide margins, no matter what it may contain. The contents of this one are worthy of the form in which they are published. Though nominally a second edition, it is actually a new work, being a consolidation under a new form, and with additions, of the author's previous works "On the Treatment of Fractures" and "On the Treatment of Wounds." But, as the author says, "Wounds are fractures, and fractures wounds; differing in the situation and density of the structures involved, but essentially solutions of continuity, similar in causation, in processes of physiological repair, and in surgical treatment."

The gist of this whole book is to be found on page 286: "That infection is always floating in the atmosphere, ready to settle, in the shape of impalpable and implacable germs, into any breach which may be made in the surface of a living body, is an idea which has never troubled me. The prescription, inspired by that idea, to rub strong carbolic acid into the innermost recesses of a compound fracture, to pursue and kill the germs; the warning that an antiseptic dressing may lose all its potency through a hole no bigger than a pin's point, in the investing Mackintosh, admitting countless germs; that a dressing must be changed as soon as a little discharge permeates it, lest a septic channel be established for the ubiquitous and maleficent vibrios; that these will settle down, as a swarm from the air, on a granulating sore, if the spray be not kept in action while it is dressed, are—I say it with the sincerest respect—questionable propositions."

It is well known to the readers of Mr. Gamgee that to him these propositions are no longer questionable. He simply does not believe them. He rejects a system of surgery founded on Pasteur's theory of germs. He believes in antiseptics simply up to the point of perfect cleanliness, and for his own part he prefers dry dressings, drainage, and rest for the treatment of all wounds. He has been, and is now, perhaps, the strongest advocate of these views, and the cases and clinical remarks which make up this very instructive and readable book are intended to teach, among other general principles of surgery, what may be done by simple methods of wound treatment. The time has been during the past few years when he has stood almost alone in advocating and practicing these principles.

It is needless to go into details over the cases themselves. They are interesting records intended for students, drawn from a large surgical practice, and much valuable information is conveyed by them in a colloquial form.

Excision of the Knee Joint, with Report of Twenty-eight Cases. Illustrated by Thirteen Photo-lithographs and Wood Engravings. By GEORGE EDGEWORTH FENWICK, M. D., C. M., Professor of Surgery, McGill University, Surgeon to the Montreal General Hospital. Montreal: Dawson Brothers, 1883. Pp. 68. [Price, \$2.25.]

THE object of this little work is to place on record the statistics of the Montreal General Hospital in reference to the operation of excision of the knee joint. Of the twenty-eight cases, a majority have been treated by the author, a number by Dr. Roddick, and a few by others. Only one ended fatally (from pyæmia), and in two the limb was subsequently amputated. In one of these amputation was done because the patient insisted upon it, and in the other the patient contracted small-pox, and amputation was rendered necessary by suppuration. There were only four cases in which the shortening reported exceeded two inches, and in three it was less than one inch.

The point of individuality in the author's method of operating consists in so sawing the surfaces of the femur and tibia that the former shall be convex and the latter concave, the one fitting into the other. By this simple measure he obtains perfect apposition and more satisfactory union.

BOOKS AND PAMPHLETS RECEIVED.

A Manual of Psychological Medicine and Allied Nervous Diseases. Containing the Description, Ætiology, Diagnosis, Pathology, and Treatment of Insanity, with Especial Reference to the Clinical Features of Mental Diseases and the Allied Neuroses, and its Medico-Legal Aspects, with a Carefully Prepared Digest of the Lunacy Laws in the Various States relating to the Care, Custody, and Responsibility of the Insane. Designed for the General Practitioner of Medicine. By Edward C. Mann, M. D., Member of the New York Medico-Legal Society, etc. With Phototype Plates and Other Illustrations. Philadelphia: P. Blakiston, Son & Co., 1883. Pp. xvi-33 to 699, inclusive.

Chemistry: Inorganic and Organic, with Experiments. By Charles London Bloxam, Professor of Chemistry in King's College, London, etc. From the Fifth and Revised English Edition. With Two Hundred and Ninety-two Illustrations. Philadelphia: Henry C. Lea's Son & Co., 1883. Pp. xxvii-33 to 738, inclusive.

An Ethical Symposium: being a Series of Papers concerning Medical Ethics and Etiquette from the Liberal Standpoint. By Alfred C. Post, William S. Ely, S. Oakley Van der Poel, Lewis S. Pilecher, Thomas Hun, William C. Wey, John Ordranoux, Daniel B. St. John Roosa, Cornelius R. Agnew, Abraham Jacobbi, and H. R. Hopkins. With an Appendix. New York: G. P. Putnam's Sons, 1883. Pp. ix-213. [Price, \$1.25.]

A Treatise on the Diseases of the Nervous System. By James Ross, M. D., LL. D., Fellow of the Royal College of Physicians, London, etc. Illustrated with Lithographs, Photographs, and Three Hundred and Thirty Wood-cuts. Second Edition, Revised and Enlarged. New York: William Wood & Co., 1883. Two vols. Pp. xxi-1023; ix-1047.

A Practical Treatise on Materia Medica and Therapeutics. By Roberts Bartholow, M. A., M. D., LL. D., Professor of Materia Medica and General Therapeutics in the Jefferson Medical College of Philadelphia, etc. Fifth Edition, Revised and Enlarged. New York: D. Appleton & Co., 1884. Pp. xxii-738.

The Pathology and Treatment of Venereal Diseases. By Freeman J. Bumstead, M. D., LL. D., late Professor of Venereal Diseases at the College of Physicians and Surgeons, etc., and Robert W. Taylor, A. M., M. D., Professor of Venereal and Skin Diseases in the University of Vermont, etc. Fifth Edition, Revised and Rewritten, with many Additions by Dr. Taylor. With

139 Wood-cuts and 13 Chromo-lithographic Figures. Philadelphia: Henry C. Lea's Son & Co., 1883. Pp. xxiii-33 to 906, inclusive.

The Law of Sex: being an Exposition of the Natural Law by which the Sex of Offspring is controlled in Man and the Lower Animals, and Giving the Solution of Various Social Problems. With Forty Illustrative Portraits. By George B. Starkweather, F. R. G. S. London: J. & A. Churchill, 1883. Pp. xvi-276.

Cruise of the Revenue Steamer Corwin in Alaska and the N. W. Arctic Ocean in 1881. Notes and Memoranda: Medical and Anthropological; Botanical; Ornithological. Washington: Government Printing Office, 1883. 4to, pp. 120.

A Handbook of Therapeutics. By Sydney Ringer, M. D., Professor of the Principles and Practice of Medicine in University College, etc. Tenth Edition. New York: William Wood & Co., 1883. Pp. xi-688.

Transactions of the Academy of Medicine in Ireland. Vol. I. Edited by William Thomson, M. A., F. R. C. S., General Secretary; Surgeon to the Richmond Hospital, Dublin. Dublin: Fannin & Co., 1883. Pp. xxxi-382.

Manual of General Medicinal Technology, including Prescription-Writing. By Edward Curtis, A. M., M. D., Professor of Materia Medica and Therapeutics, College of Physicians and Surgeons, etc. New York: William Wood & Co., 1883. 32mo, pp. viii-234.

Woman as a Physician. Illustrious Examples drawn from History, etc. By Eugene F. Cordell, M. D., Professor of Materia Medica and Therapeutics in the Woman's Medical College of Baltimore. [Reprint from the "Maryland Medical Journal."]

The Physician's Daily Pocket Record, Comprising a Visiting List, Many Useful Memoranda, Tables, etc. By S. W. Butler, M. D. Eighteenth year. Edited by D. G. Brinton, M. D. Philadelphia: Office of the "Medical and Surgical Reporter," 1883.

Quarterly Report of Medical Officers, United States Army, with their Stations and Duties, as Reported to the Surgeon-General, October 1, 1883.

Transactions of the New York Medico-Chirurgical Society, 1882.

Correspondence.

LETTER FROM WASHINGTON.

The Naval Medical Society.—Physicians in Civil Life and those in the Government Service.—The District Medical Association.—The Medical Society.—Mr. Graham Bell and the Rev. Dr. Gallaudet on the Education of Deaf-Mutes.—Dr. Sternberg on Bacteria.—The Forthcoming Report of the Surgeon-General of the Navy.

WASHINGTON, November 6, 1883.

THE Naval Medical Society, which is now well advanced in the second year of its existence, has become a decidedly prosperous body, those medical officers who are stationed at a distance furnishing a large proportion of the papers at each meeting. At the last meeting, which occurred on the evening of November 1st, there were more papers than could be disposed of before ten o'clock, and the number present was almost larger than the Library of the Museum of Hygiene could accommodate, including visitors from the army and the district society.

The papers of the evening were: 1. A Report upon the late Epidemic of Yellow Fever at Pensacola, by Dr. D. M. Guiteras, accompanied by some typical temperature charts. 2. An Instance of Defective Plumbing, observed in his own house, by Dr. J. H. Kidder, the instance being the omission of a portion of the ventilating pipe, which should have communicated with

the soil-pipe; followed by some remarks by Mr. Robinson, the Inspector of Plumbing, upon the recent improvements made in the methods of inspection in the district. 3. A paper by Dr. John C. Wise upon the Treatment of Fractures of the Forearm, illustrated by a case occurring in his practice, and recommending the practice of extension in such fractures, as well as in those of the lower extremity. And, 4. A Report of a Remarkable Case of Double Aneurysm of the Aorta, by Dr. J. H. Bryan. One of the aneurysmal dilatations in this case had caused extensive absorption of one of the dorsal vertebræ, and another had opened into the œsophagus by adhesion. Two of the papers were from out-of-town members, and all called forth animated discussion.

There is a pretty broad difference in this city between medical men in civil life and those who are connected in one way or another with the Government. Some years ago the difference almost reached the gravity of a dissension, owing, I suppose, partly to the easy good nature of some army and navy surgeons, who were willing to practice medicine occasionally outside of their proper and limited sphere, but found that want of use had blunted the edge of their keenness in demanding fees. Taking into consideration the army and navy, the Marine-Hospital Service, and the many department clerks who have been at one time or another qualified practitioners, the number of those who can afford to compete with struggling practitioners upon these terms is so considerable that it would not be strange if there should grow up a distrustful attitude on the part of those who must live by their profession as well as in it. Quite recently I hear that there was introduced into the District Medical Association a resolution to the effect that those members of the association who become clerks, or engage in any business other than the practice of medicine, shall become, *ipso facto*, associate (i. e., non-voting) members. I mention the resolution (which, by the way, has not yet been acted upon) as illustrating the peculiar constitution of the medical association and society here, and not in a critical spirit. Indeed, the hypercritical might fail to see where the punishment is, etymologically speaking, of being made an *associate* member of an "association."

The association is not a medical, but an "ethical" body, to which every candidate for the advantages of medical converse must get admission before he can hope to belong to the medical *society* proper. The result is a very compact body, comprising most of the reputable practitioners of the district, whereby the code of ethics is maintained in a degree of absolutism not to be matched in many cities. The *society* is both kindly and liberal in admitting honorary members to a share in its discussions, but the platform of *active* membership is only to be reached through the narrow gateway of the association, after an extended probation.

But the medical man living in Washington who loves the mental friction of his fellows need not be confined to the medical society. Besides the Naval Medical Society, already mentioned, there are the Biological and Philosophical, meeting on alternate weeks, and sometimes even more interesting than the strictly professional gatherings.

Last Saturday night, for instance, at the Philosophical Society, a discussion between Mr. A. Graham Bell and Dr. Gallaudet on the subject of the education of deaf-mutes was so very entertaining that I am tempted to enlarge upon it somewhat, although it is not strictly a medical subject. Both speakers have a rare gift in expressing their thoughts extemporaneously, and both had very distinctly a message to deliver, with enough divergence in the purport of their messages to make the discussion lively and interesting. Beginning with a pretty close adherence to his text, "Some Fallacies relating to Deafness,"

Mr. Bell was led almost insensibly, as it appeared, into condemnation of the use of the sign language as a means for the instruction of those deaf from infancy. Dr. Gallaudet, as the President of the Kendal Green Deaf-Mute College, could scarcely do less than take up the cudgels in behalf of a system which is there largely practiced. As to cogency of argument, the honors were pretty equally divided; but it was noticed that, however the speakers might differ as to the value of the sign language in instructing the deaf, they both afforded striking though unconscious examples of the value which they attached to lively gesture, as illustrating and re-enforcing the power of speech.

On Friday of last week, at the Biological Society, Dr. Sternberg lectured upon bacteria, using the proof-sheets of a work he is about to publish (upon malaria), and treating more particularly of the classification of the order, and the light thrown upon the same by the results of culture experiments made by himself and others.

The forthcoming Report of the Surgeon-General of the Navy is likely to attract much more of the general attention than commonly falls to the lot of official documents. It begins by stating that the present system of annual statistical exhibits of the health of the navy began with the report issued in 1880, and that a uniform system of tabulation has now been perfected which will, in a few years, afford a valuable mass of facts bearing upon the geographical distributions of disease and its relations to age, food, clothing, and the altogether exceptional nature of the floating habitations in which it occurs. In the British naval medical reports, where a settled and continuous system of tabulation has prevailed since 1837, the advantages of large aggregates, as furnishing data for studying the sanitary conditions peculiar to sea life, are very apparent. Our own reports heretofore have consisted of individual impressions and experiences published from time to time in a fragmentary form. The tabulated reports already issued under the present system cover 54,646 cases, an aggregate as yet too small, in the opinion of the Surgeon-General, for advantageous condensation or for a statement of general results.

He recommends that the medical departments of the great naval powers be invited to a conference, with a view to the adoption of a uniform nomenclature, classification, and tabulation of diseases, and, as well, of a system of interchange of periodical reports of the movement of disease, from which international reports of sanitary conditions all over the world may be published at stated intervals. It already appears that there are periods of accession, climax, and decline, followed by intervals of comparative immunity from disease, all over the world. "Are these variations due to some mysterious general cosmical conditions developed contemporaneously in various quarters of the globe, or to waves of morbidity arising in certain localities and successively invading others at remoter points?"

Adverting next to the Naval Hospital system, he is of the opinion that some of the existing buildings no longer fulfill the requirements of modern sanitary science; few are eligibly situated, and all are too large and costly for present or probable future needs. Two of them (Chelsea, Mass., and Brooklyn) are in inclosures which are much too large and have materially appreciated in value. He therefore recommends that the establishments at Chelsea, Brooklyn, and Philadelphia be sold, and the proceeds turned into the Naval Hospital fund, from which the money was drawn to make the original purchases; that this fund be invested in Government securities, the interest on which will go far to make the system self-supporting; and that, instead of the establishments so disposed of, station hospitals be built at convenient points, suited to the needs of the locality and of the service, and intended for the accommodation of acute cases only. The cost of these station hospitals he estimates at fifteen

thousand dollars each. Chronic cases and those likely to be of long continuance are to be sent to a general hospital at a central point. For the central point he recommends Norfolk, as being in a mild climate, easily accessible at all seasons, and provided already with extensive grounds and suitable buildings. At the central hospital there will be an average of from five hundred to six hundred patients, affording exceptional advantages for the clinical instruction of the younger medical officers. Hither he would transport also the manufacturing and distributing laboratory now in New York, and the fifty or so insane patients usually in the Government Asylum at Washington. The establishment, if all of General Wales's plans be carried out, will correspond, with several advantages, to those now in operation at Netley and Toulou.

The Washington Hospital, he recommends, should be turned over to the Museum of Hygiene, which has proved to be a gratifying success, and which has long since overflowed the banks of its contracted quarters. The library has grown to about six thousand volumes, and is especially rich in sanitary and nautical literature. The experiment of establishing libraries of reference at all stations, and circulating medical libraries in all fleets, has also proved to be a success, and will be continued.

In general, the Report has much of the wit of brevity, and its recommendations are bold and far-reaching. I think them to be both wise and well-considered; but, when so many vested interests are attacked at once, it is inevitable that there will be active opposition and, very likely, attacks of a more or less bitter kind. An inference which may be said to draw itself is that, unless the present Surgeon-General should be reappointed, neither report nor recommendations are likely to bear fruit.

LETTER FROM LONDON.

The Remains of Harvey.

LONDON, October 20, 1883.

SINCE the turbulent times of the Chamberlens, when the Royal College of Physicians concerned itself more, so far as the public could perceive, with furthering the material interests of physicians as a class—the word “physicians” being taken in its strict English sense, excluding surgeons and general practitioners—than with the promotion of medical science, it has gradually been settling down more and more to the latter course, until of late years it has performed its appointed functions almost unnoticed in this great center of trade. Rarely, in recent times, have any of its acts or any of its purposes (if, indeed, it has entertained any purposes apart from contributing to the great and ever-present work of helping the progress of our art along) occupied the attention of men outside its own limits, or, at all events, outside the profession. An instance to the contrary has lately occurred, and one which, as it is suitably noticed by the secular press, is likely to win for the college the credit of having done a graceful act of reverence to the memory of one of its most illustrious fellows.

I refer to its transfer of the remains of the immortal Harvey to a sarcophagus of its own provision. For more than two hundred years the remains of William Harvey had slept, “lapt in lead,” in the family vault in a dilapidated country church. In the course of these many years the casing itself had come to share in the decay manifested in the surroundings. The vault has been visited from time to time by various members of the medical profession, and they have not failed to notice the encroachments of time upon the sufficiency of the leaden case. Openings were found in it, and it is said that on one occasion a visitor was astonished to see a toad hop out from one of these holes. Whether or not this incident was the starting-point of

the movement of the College of Physicians looking to a more adequate provision for protecting the remains, I can not say, but it is well known that for some time past the college has been desirous of obtaining permission from the Harvey family to furnish such provision. The members of the family are understood to have hesitated to grant the necessary permission, feeling, quite naturally, that it was their own duty and privilege to take whatever measures might be necessary. Finally, however, they yielded to the wishes of the College of Physicians, and the result has been the transfer of the remains from the vault to the Harvey Chapel above, where they now rest in a handsome sarcophagus provided by the college.

The ceremonies accompanying the transfer took place day before yesterday—St. Luke's day. The choice of that day seems to have been doubly fitting, since it is not only the day commemorative of the medical apostle, but also, as one of the memorial tablets in the chapel recounts, the anniversary of the day on which a member of the Harvey family was killed in battle. Proceeding to Hempstead, a small and obscure village in North Essex, where the Harvey family settled, the representatives of the college joined with those of the family in the simple but touching formalities. Among the medical men present, either officially or otherwise, were Sir William Jenner, Dr. H. W. Acland, Dr. George Paget, Dr. George T. Fincham, Sir Andrew Clark, Dr. F. W. Pavy, Dr. Wilson Fox, Dr. Farre, Sir Henry Pitman, Dr. Allekin, Dr. Munk, Dr. Henry Monro, Dr. C. B. Radcliffe, Dr. William Wood, Dr. Graily Hewitt, Dr. Alfred Meadows, Dr. Douglas Powell, Dr. W. G. Hunter, Dr. Broadbent, and the bearers, Sir Risdon Bennett, Dr. Owen Rees, Dr. Sieveking, Dr. Quain, Dr. B. W. Richardson, Dr. Dyce Duckworth, Dr. Norman Moore, and Dr. Shepherd. The remains were borne from the vault round to the porch of the church, and thence into the chapel. The leaden case had been restored to its original condition so far as possible, and, inclosed therein, the remains were committed to the sarcophagus. A short service having been said by the clergyman, the president of the Royal College of Physicians deposited a copy of Harvey's works, in Latin, published by the college in 1766, together with photographs of the church and the following record written on parchment:

The body of William Harvey, “lapt in lead,” simply soldered, was laid, without shell or inclosure of any kind, in the Harvey vault of the church of Hempstead, Essex, in June, 1657. In the course of time the lead inclosing the remains was, from exposure and natural decay, so seriously damaged as to endanger its preservation and render some repair of it the duty of those interested in the memory of the illustrious discoverer of the circulation of the blood. The Royal College of Physicians of London, of which corporate body Harvey was a munificent benefactor, and which by his favor is the possessor in perpetuity of his patrimonial estate at Burmarsh, Kent, did, in 1882 and 1883, by permission of the representatives of the Harvey family, undertake that duty. In accordance with this determination, the leaden mortuary chest containing the remains of Harvey was repaired, and, as far as possible, restored to its original state, and on this 18th of October, 1883, in the presence of three representatives of the Harvey family and of the president, the office bearers, and many other fellows of the Royal College of Physicians (whose names are hereunto subscribed), was reverently translated from the Harvey vault to this sarcophagus, raised by the college for its reception and preservation.

Two years ago the tercentenary of Harvey's birth was celebrated by the erection of his statue at Folkestone, where he was born, and now this tardy attention to his remains at Hempstead crowns all that it has seemed well to do to insure, not the perpetuation of his memory, for that is imperishable, but a closer connection of our feelings with the man himself, in place of a vague sentiment concerning the discoverer of the circulation.

THE
NEW YORK MEDICAL JOURNAL,
A Weekly Review of Medicine.

Published by
D. APPLETON & Co.

Edited by
FRANK P. FOSTER, M. D.

NEW YORK, SATURDAY, NOV. 10, 1883.

THE ACADEMY OF MEDICINE IN IRELAND.

It is but a few months since we chronicled the amalgamation of the various medical societies of Dublin into one organization entitled the Academy of Medicine in Ireland, and now a handsome volume comes to us giving the "Transactions" from December, 1882, to and including May of this year. Although originally formed of four Dublin societies, the Medical, the Surgical, the Obstetrical, and the Pathological, and although its membership is drawn largely from Dublin, we observe in the list of fellows and members the names of a number of gentlemen living elsewhere in Ireland, and even in other parts of the United Kingdom. It may be that these gentlemen were already members of one or another of the component societies; at all events, the plan of not making residence in Dublin necessary to membership must be allowed to be a good one. The tendency of our societies here is to impair their usefulness by narrow geographical limitations. We have before alluded to this fact with regret.

It may be remembered that, at the time the formation of the Academy of Medicine in Ireland was under consideration, about a year ago, one or two of the Dublin societies hesitated to sink their own autonomy by joining in the scheme. It is easy to understand a certain sentimental unwillingness of this sort, but it is hardly to be supposed that the feeling will linger long, even if it has not already died out. The individuality of each of the original societies survives, to all reasonable intents and purposes. Each has become a section of the Academy, choosing officers and holding meetings of its own, and each Sectional Council is entitled to two representatives in the General Council, besides its president and secretary. Combined, the representatives of the sections far outnumber the other members of the General Council, which manages the business of the Academy.

In addition to the due weight thus secured for the preferences of each section in matters affecting the general working of the organization, provision is made against clashing in the scientific work. For example, it is stipulated in the Rules that no pathological specimen shall be exhibited at any section other than the Pathological, except by card; and such exhibition does not preclude any subsequent communication regarding the specimen at the Pathological Section.

There is one feature that strikes us as odd—namely, that the meetings are virtually private, although any fellow or member may introduce two visitors by cards obtained from the Sectional Secretaries, and a medical officer of the army or navy is entitled to admission on presenting his own card. No doubt the meetings are thus practically open to the profession, and under-

graduates may become Student Associates, but it is not easy to see why there should be any restriction. Any physician is admitted without question to the meetings of our public societies, and we have yet to hear of any objection to the practice. It is quite practicable to restrict the membership without excluding any one from the meetings.

Besides the four sections, there are two sub-sections—one of Anatomy and Physiology, and one of Public Health. There is also a Committee of Reference, answering to what we commonly call a pathological committee. All things considered, the organization of the Academy of Medicine in Ireland seems to have been carried out in a way calculated to promote effective scientific work. If any proof were needed that such has been the case, it might be found in abundance in the volume of "Transactions."

An analysis of the contents of the volume, based on the proportion of work done by the several sections, would scarcely show the relative amount of consideration given to medicine, surgery, obstetrics, pathology, public health, and anatomy and physiology, for in one instance a paper that ought properly to have come before the Surgical Section was read before the Medical Section—a paper on the Successful Removal of a Laryngeal Polypus by Voltolini's Method. Moreover, as is the case with our Pathological Society, the work of the Pathological Section does not seem to have been at all confined to pathological discussion, but to have turned upon anything that happened to be illustrated by a specimen; consequently the proceedings of that section may be said to furnish but little if any indication of the degree to which strict pathological inquiry has been pursued by the Academy.

The fifty-one papers include eighteen read before the Pathological Section, eleven before the Surgical, ten before the Medical, seven before the Obstetrical, four before the Sub-section of Public Health, and one before the Sub-section of Anatomy and Physiology. Not only were more papers read before the first-mentioned section, but its proceedings take up nearly one third of the entire volume. Concerning the value of the papers published in the first volume of the Academy's "Transactions," it must be said to be very great. It is only to be regretted that the discussions also are not given.

The preponderance of ostensible over real pathological work in an organization of this sort, made up of the practitioners of an English-speaking country, it would probably be very difficult to do away with. There is enough of the realistic about a morbid specimen to keep the attention from flagging, and yet it seldom stimulates a meeting to pathological study. It is not at all certain, however, that the opposite state of things is desirable. The pursuit of pathological investigation is necessarily a work for individuals, and not for assemblages.

WILLIAM HARVEY.

WHEN we remember with what unanimity the world accords distinction for a great discovery, and how little, if at all, it troubles itself to discriminate between those discoveries that come to men by accident, as it were, and those others that are

reached only by dint of the most persevering and original research, we can scarcely wonder that Dr. William Harvey is known, so far as he is known at all to the world at large, as the discoverer of the circulation. It is in the nature of things that he should be so known, and the fact is not to be regretted, but it is to be hoped that the recent ceremonies attending the commitment of his remains to a more fitting receptacle than the rude and dilapidated casing in which they have slept for more than two hundred years—an account of which is given by our London correspondent—will have the effect of drawing attention anew to the real splendor of Harvey's genius, by recalling the contrast between his great discovery and a mere discovery in the ordinary sense of the word.

Servetus had, it is true, already demonstrated the lesser circulation; but the blood was still supposed to be carried from the liver to the heart, which, in turn, distributed it to the body through the veins, the arteries being held to be only the channels through which the numerous hypothetical entities grouped under the term "spirits" were conveyed to the various parts. Not only Servetus, but Realdus Columbus and Cæsalpin, had stood on the verge of the grand induction made by Harvey; but it is none the less puerile to speak of the latter as having simply given the finishing touch to their labors. On the contrary, difficult as it is for us, with our present knowledge, to realize how they could fail of the final step in the theory of the circulation, it reflects all the more luster on Harvey's sagacity that he was able to take firm hold upon what had been almost within their grasp.

But, grand as the generalization was that embodied Harvey's great discovery, and admirable as the course of research, the patient observation repeated again and again, was by which he arrived at it, the discovery itself was not his greatest achievement. Indeed, had he failed to make it, he would yet have rendered its speedy attainment a certainty, for he established and inculcated methods of study that could not fail to lead to it. But, not only were those methods calculated to secure this single result, they were such as to carry an influence far beyond the scope even of so important an element in animal physiology as the circulation of the blood. It is safe to say that it was not our understanding of the circulation alone that was assured by Harvey's investigations—in every nook of the great field of biology they were felt as an impetus and a guide; their impelling energy has been at work ever since, and their guidance has never failed. They gave the *coup de grâce* to the spirit of speculation and plausibility, and established exact observation and critical interpretation in their place.

With all our veneration for Harvey's genius, let us not forget that it was in Italy that he studied anatomy, under Fabricius, where, it is not ungenerous to suppose, he took in the rudiments that he afterward developed into such a shapely structure. In his native land he met with honor, it is true, but not, we must infer, until he had battled for several years with incredulity, for his work, entitled "*Exercitatio Anatomica de Motu Cordis et Sanguinis Circulatione*," was first published, not in England, but in Frankfort.

Harvey's achievements appeal not only to the professed investigator, but to the physician. He was not a man of leisure; he had no fund, either of time or of money, at his command, and no elaborate outfit. He was a practitioner of medicine, vexed with the every-day worries that are the common lot of our profession. Let the lesson be drawn that there is no man too much immersed in affairs, too much taxed in matters of detail, to give some share of his attention to endeavors to aid in the advancement of the sciences on which medicine rests.

THE COUNTY MEDICAL SOCIETY'S ANNUAL PRIZE.

WE are not without hope that one good effect, quite apart from the question of ethics, may turn out to have been wrought by the gathering of so great a number of the members of the Medical Society of the County of New York as was witnessed on the occasion of the annual election of officers last month, for many of those present probably learned for the first time, as they listened to Dr. Purdy's report in behalf of the Committee on Prize Essays, that there was such a thing as a prize offered by the society. The result will be, we trust, that some of those gentlemen, having been brought to realize the fact, will enter into competition for the prize in the future.

It must be on account of the absence of any wide knowledge of the opportunity that for the past two years the committee has not felt itself warranted in awarding the prize. This year but one essay was sent in, and that was so inferior in quality, the committee reported, that it failed utterly to deserve recompense. Much the same report had to be made the year before.

The conditions of the prize should be generally understood. It is an annual prize of a gold medal, of the value of one hundred dollars, to be awarded to the author of the best essay on any medical subject, provided any one of the essays is judged worthy of the award. The competition is open to all the members of the society.

It seems discreditable that two years should have passed without any essay worthy of the medal having been presented. The intrinsic value of the prize is small, it is true, but that is a matter that scarcely counts for much among the considerations that ordinarily induce men to compete in this way. A successful essayist wins the respect of many who perhaps never knew of him before, not only in the society itself, but among the profession at large, by the publication of the essay. The society's membership is very large—not far short of a thousand—and surely there ought to be many of its members with sufficient ambition and ability to make a creditable contest every year.

MINOR PARAGRAPHS.

THE INDEX-CATALOGUE.

THE fourth volume of the "Index-Catalogue of the Library of the Surgeon-General's Office" closes with an entry of the works of Antonius Fizes. This shows the rapid progress that is being made in this great work, and the appearance of the volume reminds us anew of the heavy obligation under which the profession rests to Dr. Billings and his coadjutors. We can only repeat all that we have heretofore said in praise of the undertaking and

the way in which it has thus far been carried on. When we consider the size of these volumes, and the sort of matter that makes up their contents, the promptness with which they succeed each other becomes little less marvelous than their fullness and accuracy.

THE ARMY MEDICAL LIBRARY AND MUSEUM.

It appears by the annual report prepared by the late Surgeon-General Crane, for the year ending June 30th, that 3,912 volumes and about 5,000 pamphlets were added to the Library of the Surgeon-General's Office during the year, making the entire collection now about 60,900 volumes and 68,700 pamphlets. To the Army Medical Museum 638 specimens were added, 94 by purchase, and 544 by gift. The report renews the recommendation for a fire-proof building for the library and the museum.

A NEW TREATMENT OF CHOLERA.

An enthusiastic and, we must say, somewhat imaginative correspondent of the "Lancet" proposes to treat cholera patients by injections into the bladder. He alludes to the empty and contracted state of that organ in cases of cholera, and to the small opportunity there is for injecting any noteworthy bulk of liquid (liquid being what is wanted) under the skin or into the veins. He is not unmindful of the feeble absorbent power ordinarily manifested by the bladder, but believes that the case would be different in cholera patients. Intra-peritoneal injections, he thinks, ought not to be used until after experiments on a large scale have been made with the lower animals. To the latter caution he might have added that one little desideratum is a method of injection that will enable the operator to perforate the parietal peritonæum without also plunging his instrument into the viscera.

NEWS ITEMS.

INFECTIOUS DISEASES IN NEW YORK.—We are indebted to the Sanitary Bureau of the Health Department for the following statement of cases and deaths reported during the two weeks ending October 30, 1883:

DISEASES.	Week ending Oct. 30.		Week ending Nov. 6.	
	Cases.	Deaths.	Cases.	Deaths.
Typhus.....	1	0	1	0
Typhoid Fever.....	61	22	36	16
Scarlet Fever.....	55	9	38	6
Cerebro-spinal meningitis....	6	5	4	4
Measles.....	29	7	19	3
Diphtheria.....	43	28	31	19

THE ACADEMY OF MEDICINE.—At the next meeting, to be held Thursday evening, the 15th inst., Dr. Francis Delafield will read a paper on Typhoid Fever in New York. It is expected that Dr. Loomis, Dr. Draper, Dr. Janeway, Dr. A. A. Smith, and others will take part in the discussion.

THE NEW YORK POLYCLINIC.—Dr. Lewis S. Pilcher, of Brooklyn, gave a lecture before the surgical class on Friday of last week, on the Mechanism, Diagnosis, Pathology, and Treatment of Fractures of the Radius near the Wrist Joint.

THE WOMAN'S MEDICAL COLLEGE OF THE NEW YORK INFIRMARY.—Dr. William Oliver Moore has been appointed professor of diseases of the eye and ear, in place of Dr. Charles Stedman Bull, resigned.

THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF GEORGETOWN.—Dr. John B. Hamilton, the Surgeon-General of the Marine-Hospital Service, has been elected professor of surgery.

A SANITARY CONVENTION will be held at London, Ontario, on the 16th and 17th inst., under the auspices of the Provincial Board of Health.

THE LATE PROFESSOR WILLIAM H. BYFORD, Jr.—The following resolutions have been adopted by the faculty of the Minnesota College Hospital:

Resolved, That as it hath pleased a loving and gracious Father to permit Dr. Byford, after a long and protracted period of great suffering, to lay gently down the burden of life; that in his early death the college to which he was devotedly attached suffers the great loss of an efficient, wise, and honorable instructor, whose efforts in its behalf and in the cause of medical education in general were constant and always marked by that wisdom and culture which are born of a wide experience and a liberal mind.

Resolved, That all his intercourse with his friends and professional brethren was marked by a high sense of honor and courtesy, and in his early and sudden death we lose a wise counselor and helpful friend.

Resolved, That we deeply sympathize with his bereaved and sorrowing wife, with his honored father and afflicted family in this their great sorrow.

Resolved, That a copy of these resolutions be sent to his bereaved wife, his sorrowing father and family, and that copies be sent for publication to the local papers and prominent medical journals.

OBITUARY NOTES.

PROFESSOR DEPAUL, OF PARIS.—The death is announced of M. J.-A.-H. Depaul, who for twenty-one years past has been a professor of obstetrics in the Paris Faculty of Medicine. M. Depaul was born at Pau, in 1811, and received his medical education in Paris. He was made a member of the *Académie de médecine* in 1852, and has been a prominent and energetic participant in many of the debates held in that body, not only on obstetrics, but on many other topics, especially vaccination. It was he who took the leading part in securing a recognition in France of the danger of vaccinal syphilis and of the importance of animal vaccination. He also was conspicuous in maintaining the equine origin of the cow-pox. He was the founder of the "Archives de tocologie," a monthly journal of obstetrics and diseases of women and children, and the author of several monographs in obstetrics, notably a treatise on obstetrical auscultation and a clinical work on obstetrics.

Proceedings of Societies.

NEW YORK MEDICAL AND SURGICAL SOCIETY.

A STATED meeting was held October 13, 1883, Dr. H. B. SANDS Chairman for the evening.

SUBNITRATE OF BISMUTH AS A DRESSING IN OPERATIONS FOR CICATRICIAL CONTRACTION.—Dr. ALFRED C. POST mentioned the case of a man brought to the Presbyterian Hospital, with the left arm bound firmly across the chest by cicatricial bands following a burn which had occurred some months before. Fourteen parallel incisions, 15 to 20 ctm. in length, were made through the cicatricial tissue, after which the arm could be lifted from the side to a little above a right angle. The line of the incisions was filled with subnitrate of bismuth, sprinkled on by means of a pepper-box. The powder adhered to the parts and formed a sort of scab. At each fresh dressing another quantity was applied. Exuberant granulations were thus kept down, while scarcely any inflammation took place, and but a very small

amount of suppuration. The wounds healed in from four to six weeks. He had since used this dressing in a number of cases, and with greater satisfaction than any other application. He had also used it in the case of granulating surfaces following burns, and had found that it diminished the amount of granulations, the contraction of which, when they were allowed to develop, was the chief source of deformity. In neither children nor adults had the dressing caused the slightest toxic effect.

THE DIAGNOSTIC VALUE OF THE BACILLI OF TUBERCLE.—Dr. AUSTIN FLINT stated that he had lately made the *Bacillus tuberculosis* in sputa a subject of clinical study, with reference especially to the diagnosis of pulmonary phthisis; and, as illustrating the value of the presence and the absence of this micro-organism, he related the following cases: The first case was that of a woman, over sixty years of age, who had had cough and expectoration for a considerable period. The physical examination rendered it probable that phthisis existed, but the proof was not positive; there was room for supposing that the case might be one of bronchitis and emphysema. Microscopical examination of the sputa showed the presence of bacilli.

The second case was that of a patient advanced in years, who had long suffered from cough and purulent expectoration. The physical signs rendered chronic bronchitis with dilated bronchial tubes probable. The microscopical examination of the sputa showed very few bacilli.

The third case was that of a woman, forty years of age, suffering from aphonia. She was examined in the summer, and the result was negative as regarded the physical signs of phthisis; but the aphonia continued, and the sputa were examined with reference to the question whether the aphonia was nervous or phthisical. No bacilli were found, and the patient had since fully recovered her voice.

The fourth case was that of a woman, about forty years of age, who had repeatedly had small bronchial hæmorrhages, always at the time of menstruation, which was normal. She had had no cough, but she was very anxious as to the possibility of the existence of phthisis. The physical examination of the chest was negative, and no bacilli were found in the sputa, which, being very small in quantity, were obtained with difficulty.

In two cases there were positive signs of phthisis, but the disease was not advanced. The patients had gained in weight, and the symptoms, together with the physical signs, were such as to lead to the belief that the disease was not progressing. Examinations of the sputa, however, showed the presence of bacilli, but in only moderate numbers.

The last case mentioned was that of a woman, forty years of age, who had had cough and expectoration for more than three years. She was considerably emaciated and enfeebled. The last winter and spring months were passed in Colorado. Before going there, she had hectic paroxysms, the expectoration was abundant, her appetite was poor, and her condition seemed to offer little in the way of a favorable prognosis. The improvement in Colorado was marked: she ceased to have paroxysms of fever, her appetite improved, she gained in weight, and there was notable improvement in the pulmonary symptoms. A physical examination of the chest, after her return from Colorado, showed solidification and cavity, but repeated examinations of the sputa were negative as regarded the presence of bacilli. Taking this latter fact in connection with the co-existing symptoms and the history, it seemed fair to conclude that the tuberculous disease in this case had ended, and that the patient was now suffering only from the lesions which were produced by the disease.

These few cases were related as illustrations. Dr. Flint added that, so far as his experience had gone thus far, it con-

firmed the value of the presence of bacilli in the sputa as positive proof of phthisis, their absence being of more or less value in the exclusion of phthisis, and the value of their abundance or scarcity, as bearing on the question of whether the disease was or was not actively progressing.

Dr. Flint stated that the microscopical examinations in these cases had been made by Dr. Welch and by Dr. William H. Flint.

Dr. Post asked Dr. Flint whether he considered hæmoptysis occurring at the time of menstruation as less significant of phthisis than when it occurred at other times.

Dr. FLINT replied in the affirmative. Patients without any affection of the lungs were known sometimes to have hæmoptysis at the time of the menstrual flow; but this was less likely to occur than where the flow failed to appear.

ACUTE YELLOW ATROPHY OF THE LIVER.—Dr. FRANCIS DELA-FIELD gave the history of a case as follows: The patient was a woman, twenty-nine years of age, who entered Bellevue Hospital on the 29th of September. Three weeks previously she had been seized with headache, vomiting, prostration, and pain in the epigastrium. After three or four days she became jaundiced, the urine was high-colored, and the fæces were of a clay color; there was absence of fever. She continued in this condition until her admission, at which time there was considerable jaundice, nearly everything taken was vomited, she complained a good deal of pain at the epigastrium, the urine was high-colored, and the bowels were constipated, but what was passed was clay-colored. There was not very much prostration; there was no emaciation, no febrile movement, and no cerebral symptoms. The patient seemed to have been suffering from the ordinary jaundice which accompanies gastro-duodenitis. She did well until the 5th of October; the vomiting ceased entirely, but some jaundice still remained. On the 6th of October she was not quite so well; she again began to vomit. On the 7th vomiting became much worse, the jaundice was more decided, the temperature rose to 100° F., cerebral symptoms developed, and there was delirium alternating with semi-coma; the urine for the first time contained albumin in addition to bile pigment. The liver was distinctly diminished in size, and on the 8th the diminution was still more marked. The temperature ranged from 100° to 101°, the patient was still comatose or semi-comatose, and in this condition she died on the 9th of October. At the autopsy the liver and the kidneys showed the typical lesions of acute yellow atrophy. The liver weighed one pound and three quarters; it was soft and mottled red and yellow; the hepatic cells showed the regular changes, as did also the kidney tissue.

MASTOIDITIS FOLLOWING DIPHTHERIA.—Dr. T. M. MARKOE presented a piece of bone of considerable size, discharged in the course of suppurating mastoiditis following diphtheria. The case occurred in the practice of a physician in the country, who stated that the patient began immediately to recover after the discharge of the piece of bone, and suggested that trephining might have proved of benefit.

PEAT AS AN ABSORBENT DRESSING FOR WOUNDS.—The CHAIRMAN made some remarks upon this subject, suggested by those of Dr. Post on subnitrate of bismuth. Peat had been largely used as an absorbent dressing for surgical wounds by European operators, and, having received a supply from Dr. Neuber, an assistant at Esmarch's clinic, Dr. Sands had been testing its value at the Roosevelt Hospital during the past six months. It had proved superior in some respects to all other dressings which he had before used. Notwithstanding the bulkiness of the dressing, it could be neatly adapted to the surface, and be comfortably worn by the patient. In order to develop its absorbent qualities to the best advantage, the peat re-

quired to be moistened, the solution commonly used being the bichloride of mercury. It would then take up seven or eight times its weight of fluid. It was applied in bags of suitable size and shape. The value of this form of dressing had been well illustrated in a case of white swelling of the wrist, in which it was found necessary to excise all but two of the carpal bones, and to remove the extremities of the radius, ulna, and several of the metacarpal bones. The operation was very long and severe. Care was taken to irrigate the wound with an antiseptic solution during the operation, then to insert a decalcified-bone drainage-tube, and finally to apply the peat dressing, which was allowed to remain for three weeks without being changed. Meanwhile the patient was perfectly comfortable and free from pain and fever. When the dressing was removed, the drainage-tube was found to have been absorbed, no suppuration had taken place, and the wound had healed, except one small granulating surface. More recently Dr. Sands had excised the elbow joint for ankylosis, in the case of a child upon whom he had done a similar operation previously. The first operation was followed by profuse suppuration. In the last, in which the peat dressing was used, the wound healed without suppuration. Formerly the pad used with Lister's dressing became impervious and foul. The dressing being porous, the secretions from the wound were quickly absorbed, and, appearing at the surface evaporated, leaving the pad almost entirely dry, instead of accumulating beneath the dressing, as often happened when this was made of a less absorbent material.

Dr. ROBERT F. WEIR confirmed the statements of the Chairman with regard to the value of the peat dressing, and said that a more carbonaceous and a more perfectly antiseptic form of the material was now being used at Kiel. Lately, "wood-wool" was employed as a dressing for wounds, by mixing one part of black peat with four of the ordinary kind, by Bruns and Czerny, and he himself had found it of excellent service in a number of cases in which he had tried it at the New York Hospital. This wood-wool was primarily manufactured for conversion into paper. Its absorbent property was even greater than that of peat, the latter being capable of absorbing nine times its weight, while the former would absorb thirteen times its weight. Dr. Weir thought, however, in his recent visit abroad, that the best results, with the quickest union, were obtained in wounds by Schede, of Hamburg, who used the finest jute as a dressing, and made it a rule not to allow it to remain on longer than a week or ten days. Absolute rest was enforced even in the case of comparatively simple wounds, and in each instance the entire limb was immobilized until the dressing was changed, when the wound was almost certain to be found completely healed. It was interesting to note the march of surgical methods in different places; for instance, in the north of Germany, notably in Hamburg, Kiel, and Berlin, at present the bichloride of mercury was being largely resorted to as an antiseptic, while in southern Germany, especially at Billroth's clinic, iodoform was chiefly employed.

ABSORPTION OF CARBOLIC ACID.—Dr. A. B. BALL reported a case of poisoning by a very small quantity of carbolic acid. The patient, a boy fourteen years of age, had been operated on by Dr. Sands for empyema, a free opening for drainage having been made under Lister spray, and a peat dressing applied. Three weeks before, when the peat-bag was received from Germany, it had been sprinkled with carbolic acid, and at the time of its application retained a slight odor of the acid. On the morning following the operation, Dr. Ball found the boy's mother in great consternation over the almost completely black appearance of the boy's urine. No other symptoms of carbolic-acid poisoning were noticeable. As it seemed very improbable that the discoloration of the urine was due to inhalation of the carbolic-

acid spray, the peat-bag was suspected, and was found to have a faint, but distinct, odor of the acid. After removal of the bag, the dark color of the urine disappeared entirely within the next twenty-four hours. On the establishment of the drainage-opening, air had entered the pleural cavity freely with each inspiration, and thus air, which had been carbolized by passing through the peat-bag, had been presented constantly to a large absorptive surface.

Dr. WEIR remarked that the peat or wood-wool dressing was particularly efficacious after operating in empyema, from the great absorbing power. He also remarked that pure carbolic acid injected into a hydrocele sac produced no unpleasant symptoms, had never in his experience been followed by coloring of the urine or other signs of systemic absorption, and always cured the disease. It probably acted as a caustic, immediately destroying the absorbent power of the surface with which it came in contact.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

A REGULAR meeting was held October 25, 1883, the President, Dr. TYSON, in the chair.

THE PATHOLOGY OF PHTHISIS AND ITS LARYNGEAL COMPLICATIONS.—Dr. SEILER read a paper on the pathology of tuberculosis and phthisis and the laryngeal complications of the two diseases. He defined tuberculosis as a self-infectious disease, manifesting itself primarily by the production of minute neoplasms, called miliary tubercles, which rapidly underwent retrograde metamorphosis ending in caseation, being due to the dissemination of infectious material throughout the lymph channels. This infectious cheesy matter was the product of scrofulous inflammation, and it might remain encapsulated for a long time. He then described the histological characteristics of tubercles, and showed how they might produce consolidation of the lung tissue by exciting secondary inflammation. He defined phthisis as a progressive consolidation of the lung tissue, due to a more or less localized inflammation affecting primarily the apices, followed by retrograde metamorphosis. He thought the different forms and stages, as described by many authors, were merely differences in the severity and extent of the ulcerative process. As ætiological factors, he mentioned the various causes of lowered general vitality, predisposing the respiratory organs to chronic inflammation, including heredity, peripheral nerve irritation, hypertrophic nasal catarrh, insufficient aëration of the blood, etc. Improving the general vitality would prevent an outbreak of the disease, and lead to recovery where too much lung tissue had not been destroyed. Such improvement was to be brought about more by proper feeding and exercise in the open air than by the use of drugs. On the other hand, tuberculosis was always fatal, and treatment was of no avail; but a good deal could be done to prevent the formation of the cheesy deposit by improving the health of scrofulous patients early in life, thus preventing the subsequent outbreak of tuberculosis.

The laryngeal complications of both diseases were then considered in detail, and their differences were pointed out. He stated that the laryngeal lesions never appear prior to the lung disease in phthisis; that they were characterized by a peculiar pallor of the mucous membrane; the tumefaction generally affected the posterior portion of the organ, and the ulcerations were shallow and had a tendency to spread on the surface, and tubercles or cheesy deposits were never found in the tissues of the larynx. In tuberculosis, on the other hand, tubercular deposits had been found in the larynx prior to the lung complications; the mucous membrane was of a livid red color; the tumefactions were more commonly observed in the anterior portions of the larynx; and the ulcerations were deeper, with raised edges, and often extensive destruction of tissue.

Dr. Seiler closed with the remark that the indiscriminate use in our literature of the terms phthisis and tuberculosis in referring to lung disease was calculated to mislead the student, and made careful investigation into the pathology and ætiology of these diseases extremely difficult, if not impossible.

Dr. J. C. WILSON, in response to a call by the President, said that he had listened with interest to the reading of the paper. The field covered was too great to permit a detailed discussion of the principal points. Two points, however, appeared to warrant comment:

First, Dr. Seiler had several times made use of the expression "tuberculous material not derived from the exterior." If he had understood the paper, Dr. Seiler had not indicated his views as to the nature and source of this "tuberculous material"; and he asked if Dr. Seiler followed the older doctrine—that of Buhl—or if he had some new theory as to the ætiology of tubercle?

Secondly, Dr. Seiler failed to make clear his means of recognizing tubercles, either clinically or in the laboratory.

It would be of interest to hear his views upon this vexed question. In a recent work, Hamilton, of Aberdeen, again sought to establish a histological criterion for tubercle—the presence of giant cells under a peculiar arrangement. The pathological points were the modes of degeneration—1, caseous; 2, fibroid. To the latter Dr. Seiler made no allusion. He thought, further, that sufficient emphasis had not been laid on the presence of tubercle in the various forms of phthisis as seen in post-mortem examinations. He heartily concurred in the hopeful views as to the curability of certain forms of chronic lung disease when treatment was instituted at an early period. Nothing had exerted a more unfavorable influence upon the therapeutics of such diseases than the false view that the constitutional tubercular diathesis invariably antedated the local lesions of pulmonary consumption.

Dr. F. P. HENRY remarked that Dr. Seiler's paper was so comprehensive that he found it impossible to refer to more than a few of the points contained in it. He was not inclined to draw so broad a line of distinction between that form of pulmonary disease in which miliary nodules predominated and that in which the deposit was in larger caseous masses. Like Dr. Seiler, he was by no means convinced of the primary importance of the bacillus as a cause of tuberculosis, but he was inclined, however, to attribute to it a prominent part in the production of the secondary symptoms of phthisis—those of systemic infection—which are largely septic in character. The symptoms of interference with oxidation, caused by even extensive destruction of pulmonary tissue, were subordinate to those of systemic infection caused by absorption of the contents of cavities. The presence of the bacillus in the contents of these cavities was indispensable to the production of changes capable of producing this systemic infection. A small ulcerating cavity communicating with the absorbent vessels was more disastrous in its effects than a larger cavity shut out from the absorbents by a lining membrane or wall of fibrous tissue. He understood Dr. Seiler to deny the existence of the giant cell, and to make the statement that cross-sections of blood and lymph vessels have been mistaken for it. Dr. Henry did not agree with him in this view, but thought that the irregular contour of the giant cell and its granular protoplasm were sufficiently characteristic. Additional evidence of the existence of this cell was furnished by the experiment of introducing beneath the skin of an animal two thin glass covers fastened together. In the interspace of the glasses giant cells had been found, and in such an experiment there could be no question of the cross-section of vessels. Dr. Seiler had several times referred to what was known here and elsewhere as Formad's theory of tuberculosis, which is: That in

certain animals predisposed to phthisis, and presumably in some human beings, the lymph spaces are abnormally small, or, in other words, that in a given area of tissue there is to be found a greater number of endothelial cells than in non-strumous animals. He did not think that this theory should be so extensively quoted until some more decided attempt had been made to establish or refute it. This might be readily done, he thought, by counting the cells in a given area of the tissue of strumous animals, and comparing their number with that contained in the same area of tissue of non-strumous animals. He did not think that any greater difficulty would be met with in this attempt than had been successfully encountered in the enumeration of the blood cells.

Dr. BRUEN said that he believed in a hopeful prognosis in the early stages of many varieties of phthisis; even when the process of phthisis was advanced, the management of cases was more successful when the lesions were localized; less advanced lesions were more grave when they were widely disseminated. He thought that it had been proved that phthisis could be produced by inhalation of inorganic irritating particles, especially if there was inherited predisposition to phthisis or an artificially damaged constitution. Might not bacterial elements, he asked, be among the irritants capable of developing phthisis, when inspired in large numbers? And he thought they might be even more capable of doing damage than inorganic materials, because they possessed the power of proliferation. He agreed in the main with the views expressed by Dr. Seiler, and he considered the paper most instructive and interesting.

Dr. MILLS thought it worth while to note the frequent occurrence of tuberculosis among those afflicted with chronic nervous and mental diseases. At the institutions for the feeble-minded and insane, phthisis or tuberculous was a common cause of death. This fact, he thought, would lend support to the views of Formad rather than to those of Koch.

Dr. J. T. ESKRIDGE had observed that some who had participated in the discussion had referred to the views of the pathology of tuberculosis expressed by Dr. Seiler, and to those entertained by Dr. Formad, in order to prove the same thing. He regarded the theories of each of these gentlemen as widely different. If tuberculosis was the result of inflammation in a person whose lymph channels were abnormally narrow, as claimed by the latter, he could not see that phthisis differed from tuberculosis, as maintained by the former. In regard to tuberculosis being frequently developed in chronic diseases of the brain and cord, throwing light on the pathology of the former, he thought that the association of these diseases proved nothing more than that a prolonged period of lowered functions of the body was a favorable condition for the development of tuberculosis. He confessed that he did not know what to believe with reference to the pathology of tuberculosis; to his mind there had not been enough proved to firmly establish any theory yet advanced, so that it might be accepted as positive fact. He agreed with Dr. Shakespeare in demanding more pathological investigation following the clinical observation of the disease before he could accept as positive any view of the pathology of tuberculosis. He called attention to the fact that many of the best clinical observers of large experience, such as Flint, Da Costa, and Hughes Bennett, considered tuberculosis and phthisis to be identical.

Dr. DAVIS asked Dr. Seiler if he taught that tubercle was caused by a cancerous focus? to which Dr. Seiler replied in the affirmative. Dr. Davis said it was important to know whether this is the case or not, as the German surgeons excise cancerous glands, not so much for the deformity they produce as to obviate the liability to general infection, and he asked if Dr. Seiler would sanction this practice. As regards the possibility of cure, he believed, with Koster, Billroth, and Koenig, that tubercle

was a local affection and not a general disease. He had seen tuberculosis as marked in the knee as in the lung, the miliary tubercles being within an eighth or a quarter of an inch of each other. He had also seen tumor albus of the knee recover without operation. If tuberculosis of the knee can be recovered from, he believed the same might occur in tuberculosis of the lungs.

NEW YORK ACADEMY OF MEDICINE.

A STATED meeting was held November 1, 1883, FORDYOE BARKER, M. D., LL. D., President, in the chair.

After the reading of the minutes of the previous meeting, Dr. J. G. ADAMS offered a written protest relating to that portion rescinding certain resolutions adopted by the Academy in April last, which protest he wished to have entered on the minutes of the society.

It was voted to lay the protest upon the table.

Before introducing the regular business of the evening, the PRESIDENT made some complimentary remarks on the lately deceased members, Dr. Charles Wright and Dr. Frederick D. Lente, both of whom had been expected to read papers before the Academy the present winter.

Dr. T. H. BURCHARD then read A MEMOIR OF THE LATE DR. FREDERICK D. LENTE.—Dr. Burchard described his illustrious friend as most unpretentious and gentle, standing on the very mountain-top of mental vision, and from his exalted observation taking in a broad conception of life, with all its incidental duties and responsibilities. Extreme conscientiousness might well be predicated of him as a distinguishing characteristic; his honor was as dear to him as his life. He was indefatigable as a student; retiring late and rising early, he turned to profit the midnight hours. Mere physical fatigue was to him no excuse for mental inactivity. When his tired limbs refused to carry him, he was often found late at night or early in the morning bolstered up in bed, surrounded with books and periodicals. All that he did was done with rare thoroughness. Student as he was, his studies never led him into devious and idle speculations; his ideas were always practical. As a diagnostician, he was painstaking and exact. No desire for brilliant display ever led him into the hasty expression of an immature opinion. In the widest sense of the word, he was a good physician, skillful, devoted, self-sacrificing; indifferent to his own infirmities and oblivious to personal comfort, he brought to his patient's relief a strong brain, a ripe experience, and a tender heart.

ON THE RAPID EVAUATION OF STONE FROM THE BLADDER AFTER CRUSHING; WITH THE PRESENTATION OF A NEW AND SIMPLIFIED EVAUATOR.—Dr. F. N. OTIS read a paper with this heading. He traced the history of the evacuator from the first one invented by Sir Philip Crampton down to the present time, describing that of Crampton and that of Clover in particular, referring to that of Mercier, and then, coming down to the present time, the important improvements in the vesical evacuator made by Dr. Bigelow, of Boston, and also by Sir Henry Thompson, of London, and Mr. Harrison, of Liverpool. A number of illustrations of the instrument, with its progressive modifications and improvements, were given. Regarding tolerance of the bladder to instrumental interference, Dr. Otis thought it had been established, by his own experience and that of others, long before it was first brought prominently forward by Dr. Bigelow as a fact of importance in successful litholapaxy. Dr. Bigelow had the mental acumen, the practical talent, and the courage to turn to use, in making this operation in the highest degree successful, the crude experience previously acquired by his fellow-surgeons in operations upon the genito-urinary tract. Dr. Otis believed that the principal reason of lack of

success with Clover's instrument was the use of an evacuating tube too small in size; it was taught at that time that the normal circumference of the male urethra was only twenty-one millimetres. He, however, had shown that the normal urethra would admit an instrument varying from thirty-two up to forty and more millimetres in circumference, this variation also bearing a certain ratio to the circumference of the penis. To the size of the evacuating tube used, Dr. Otis attached the greatest importance in the ease and rapidity of removal of the fragments of stone. This fact was illustrated in removing crushed coral from a bottle with the same instrument and under like conditions, except that at one experiment a tube thirty millimetres in circumference was employed, and in another one of but twenty-seven millimetres, the amount of the crushed coral removed within thirty seconds at the former experiment being 300 grains, and at the second but 180 grains. Assuming, therefore, that the normal urethra was thirty-two millimetres in circumference, he believed that any contractions below this standard should be divided, and time be allowed for healing to take place before proceeding to litholapaxy. If, however, in an old subject the prostate were enlarged, he did not insist upon passing a large-sized evacuating tube, believing that the danger of doing so was greater than that attending the disadvantages pertaining to the smaller tube. If the urethra were not enlarged to its normal size in case contractions were present, either by previous division or dilatation, there was danger of wounding the canal and producing hæmorrhage on the passage of a large-sized evacuating tube, and consequent difficulty of deciding whether damage had not been done the bladder; or, if a small-sized tube were employed, it must be attended by certain disadvantages. It was particularly important that any constriction of the external meatus should be overcome by division with the knife. Dr. Bigelow recommended the use of a tube not below 24 nor above 31 millimetres in circumference; Dr. Otis had not, in the measurement of a large number of urethras, found one normally below 28 millimetres in circumference; if, therefore, the canal fell below this size, he did not hesitate to enlarge it, believing that the inability to pass a larger instrument was due to constriction. The only change made in the Bigelow evacuating tube was a greater curvature at the end, by which it was rendered easier of introduction, and less liable to become clogged with mucus.

After describing the evacuators invented by different surgeons, and those by Dr. Bigelow in particular, and stating that he had always found the last instrument perfected by Dr. Bigelow to work with entire satisfaction, he remarked that the cost was very considerable, and there was the objection also that the strainer was liable to become clogged with mucus and other material, and require to be cleaned. Dr. Otis then described a simple instrument recently invented by himself, which, besides possessing other virtues, was reasonably cheap, being sold for half the price demanded for that of Dr. Bigelow. It consisted of a glass globe, about two inches in diameter, into one side of which a metallic tube was introduced, extending upward, and connected without with a rubber air-chamber; into the other side another metallic tube was introduced, extending downward, and connected with the tube leading to the bladder; the particles of stone fell into a receptacle attached to the globe on its lower surface. The globe was filled with water by suction force through the end of the tube, or it was poured in directly at the junction with the débris-receiver; the amount of fluid in the bladder could also be increased by the latter method. If thought desirable in any given case, the quantity of water in the glass globe could be increased by filling the air-chamber with water. Pressing upon the rubber air-chamber, the water was forced into the bladder, and, on removing the pressure, it re-

turned loaded with particles of stone, which dropped directly into the receptacle below, and were not in the least disturbed by the agitation of the fluid above.

The paper being open for discussion, Dr. E. L. KEYES said that he had not seen the instrument presented by Dr. Otis before to-day, and had not had an opportunity to test it practically, but he was pleased with its great simplicity and apparent working; it was further evidence of the great amount of inventive ingenuity possessed by the author of the paper. He had always found Dr. Bigelow's instrument answer the purpose for which it was invented perfectly, but that invented by Dr. Otis, it would seem, would answer equally well; it was smaller, more easily portable, and cheaper. Before introducing the tube entirely into the bladder, it was of advantage to distend the canal by partially evacuating the reservoir of its contained fluid. He imagined that some damage might result from the introduction of air into the bladder and its mixture with the water, if the rubber ball were compressed too forcibly. Dr. Otis's instrument possessed the advantage that, being made of glass, the operator could see the degree of progress made. As to tolerance of the bladder, that was a fact known to the first inventors of instruments for its evacuation. It might be stated, also, that the inventions of Clover and others were intended only for use upon the unhealthy, not upon the healthy, bladder. Dr. Keyes did not believe that the most successful results in litholapaxy depended alone upon the large size of the evacuating tube, or any other single factor, but upon the best combination of all the factors and conditions concerned. Doubtless the larger the tube, consistent with the size of the urethra, the better, but the possible danger of introducing a large tube through the canal, whether with reason or not, was, it seemed, considered by the majority of surgeons a sufficient ground for the employment of a smaller-sized tube, notwithstanding the disadvantages of the latter. He himself did not think we should insist upon a rigid rule as to the size of the male urethra, and upon dividing or dilating the canal in all cases in which it did not correspond to our ideal.

The discussion was closed by Dr. Otis.

NEW YORK CLINICAL SOCIETY.

A REGULAR meeting was held June 22, 1883, Dr. E. L. PART-
RIDGE Chairman.

THE TREATMENT OF HYDROCELE.—Dr. ROBERT ABBE read a paper on this subject, which will be given in a future number of the journal.

Dr. R. J. HALL had injected carbolic acid in five or six cases. All his patients were cured. He thought less inflammation was excited by it than by iodine. The quantity injected was usually 3 ss. of the pure acid, never more than 3 j. In one case no re-accumulation of fluid took place. In view of the fact that a dangerous degree of inflammation was occasionally set up by iodine, he preferred very much the treatment by carbolic acid. He quoted Virchow as authority for the statement that old hydroceles with very thick walls were almost incurable by any injection, as it was difficult for the two surfaces to come in contact and obliterate the sac; furthermore, these sacs were composed of old fibrous tissue, almost destitute of vessels, and hence reparative inflammation could not occur.

Dr. ABBE had seen some of these old cases cured by injecting iodine.

The CHAIRMAN thought that the pain produced depended more upon the nervous irritability of the patient than upon the condition of the membrane of the sac. He saw the patient who had died from the puncture. He was a very feeble old man, and probably would have died from any other slight cause.

Dr. ABBE said the pain produced was first local, then in the back, and from there it went to the pubes. He had once thought that the amount of pain depended on the thinness of the sac, but so many exceptions were found that he had concluded that no rule could be laid down in this respect. The largest amount of tincture of iodine used in any case was 3 ss. Very great shock was produced in one case in which only ℥xx were used.

Dr. J. E. WINTERS had always given a hypodermic injection of morphine before injecting the iodine, and it had seemed to him that less pain and less inflammation occurred than when this was omitted. The quantity of tincture of iodine used by him was from 3 j to 3 ij, and it was allowed to remain in the sac.

Dr. L. E. HOLT had found tapping the hydrocele with a fine trocar and then scarifying the inside of the sac with the point of the instrument to be very satisfactory in children. He had used it in nearly thirty cases, and had never seen any bad results follow. The inflammation excited was usually very moderate, and a prompt cure was generally obtained.

BRONCHO-PNEUMONIA WITH DELIRIUM.—Dr. A. A. SMITH reported a case of broncho-pneumonia accompanied with a remarkable degree of delirium. The patient, a man of twenty-four, had suffered from intermittent fever three years before, and, a few months prior to the present trouble, from an attack of dry pleurisy, from which he made a slow recovery. Phthisis was in the family on one side and gout on the other. About one month before, Dr. Smith had made out a spot of consolidation on the left side. About two weeks after this a pulmonary hæmorrhage of half a pint occurred. The temperature ran up rapidly after this to 103.5° F., where it remained for four or five days in spite of the fact that sixty grains of quinine a day were given for two days. Four days after the quinine was stopped, active delirium set in, with complete insomnia, these lasting for seventy-two hours, the temperature remaining about 101° to 102° during this period. After a natural sleep of about three hours, the patient awoke with the mind perfectly clear. The delirium did not return. The next day a new spot of broncho-pneumonia was found on the left side and one on the right side. The temperature and pulse now fell to normal, and the pneumonia was clearing up. He had seen such delirium in lobar pneumonia, and it was especially likely to occur in pleuro-pneumonia, but he had never before seen it in broncho-pneumonia. It had seemed to him quite unlikely that the delirium was due to the quinine. The patient in previous diseases had not shown a particular predisposition to head symptoms.

CYSTIC TUMOR OF THE ABDOMEN.—Dr. H. S. NORRIS read the following history:

The patient, a single man, aged twenty-seven, has always been very "rugged," and denies venereal. Has noticed, however, that for ten years his right side has been larger than the left. Was never sick in his life until one year ago, when in Pittsburg, when he had an attack of cholera morbus which was followed by a prolonged inability to take solid food without pain and nausea. During this period, up to April, 1883, his weight fell from 180 to 159. There was no vomiting of blood during this time, and as long as he confined himself to milk he was free from abdominal symptoms. On the 26th of April, at Pittsburg, he had a severe fall, some twenty feet, I believe, breaking two ribs on the right side. At that time there was some question in the mind of his physicians as to whether rupture of the liver had not occurred. He was confined to his bed for over four weeks, and returned to New York June 1st, when I saw him.

Patient is tall and thin, almost to emaciation. Walks feebly, and with a cane; has no dyspnoea, and has not had. There is

no cough. On stripping patient, I found chest-walls exceedingly thin and apparently sunken, but abdomen large, and very prominently so on the right side. Heart not displaced; no evidence of any trouble in thoracic cavity. The tumor on the right side is continuous with the liver, and extends to the level of the crest of the ilium below to the median line in front, and, as well as I could determine, nearly to the spine behind. This tumor has been increasing of late, my patient said. There was distinct fluctuation, and the diagnosis of fluid was readily made. I introduced a hypodermic needle, and, while it was in the tumor, noticed that the respiratory movements were conveyed to the needle. I drew off about half an ounce of the fluid, which I found to be clear serum; no bile. No signs of hydatids were found.

On June 8th I aspirated the tumor. I introduced the aspirating needle into the most prominent part of the tumor, the patient lying down, and drew off twelve ounces of a turbid red fluid, but could not get any more. Fluctuation was still evident in other parts of the tumor, though absent where my needle was, and it was less rounded at this point. I reintroduced the needle at the lowest point where fluctuation could be felt, which was about the anterior border of the quadratus lumborum, and drew off four ounces more of the same kind of fluid. Still fluctuation was very evident, but I did not deem it prudent to continue any farther at that time. A sharp reaction set in, with fever, rapid pulse, tympanitis, and, for a time, I feared general peritonitis, but, by the liberal use of morphia and poultices, escaped all serious trouble. The fluid removed was evidently bloody serum. It was turbid, reddish-brown, alkaline, s. g., 1012, did not coagulate spontaneously, presented no clots on standing, was loaded with albumin. In fact, in making Pettenkofer's test, it became almost solid on adding sulphuric acid. I regret to say that, after making the above tests, I overlooked the specimen entirely, so that it became decomposed and I threw it away.

On June 16th my patient called on me and reported himself better than he had been since his fall. The size of the abdomen is very much reduced, but there is still a considerable swelling, with distinct fluctuation. I introduced the hypodermic needle again and drew off some perfectly clear serum, resembling in all respects that found at the first examination.

Dr. ABBE was inclined, from the history, to think that there had been localized peritonitis in which the inflammatory products had formed adhesions, and that, bound down by these, the exudation had become localized so as to resemble a cyst. It was astonishing how soon lymph was thrown out after injuries to the peritonæum. He recalled an autopsy upon a child who had been run over by a wagon twelve hours before death. Here already the intestines were found matted together by the lymph which had been poured out.

Dr. HALL thought it well established that any cyst, after a time, might change its character. Thus, we did not always find bile in a cyst of the gall-bladder, nor the echinococcus in hydatid cysts; but the absence of these in the fluid drawn off was not to be taken as conclusive proof against those diseases.

INTUSSUSCEPTION.—Dr. L. E. HOLT presented a specimen taken from a child, two months and a half of age, who had died of intussusception after an illness of a little more than sixty hours. The child was only seen once during life. It was taken with vomiting one evening quite suddenly, the matter ejected being at first greenish, then of a very foul but not faecal odor, and the vomiting continued up to the day of death. On the second day there were four mucous and bloody stools, but after that absolutely nothing passed the bowels. Tympanitis now rapidly came on, with marked prostration. The child died in a convulsion. No abdominal tumor was made out during life.

The autopsy showed great abdominal distension from gas,

but no peritonitis. The lower part of the large intestine was empty, and, following this up, there was found, a little to the right of the spine and lying close against it, in about the region of the hepatic flexure of the colon, a tumor about two inches long and one inch in width. It was tightly held down by the mesentery. The intestine appeared healthy, and was not even much congested. The tumor was hard and solid to the touch. An unsuccessful attempt was made to force water through it from both directions. A probe was passed without much difficulty through the whole tumor, entering a small slit-like opening which appeared at its lower extremity. No orifice corresponding to the vermiform appendix could be found. The invagination was exceedingly tight. A traction force of several pounds was required for its reduction, and some of the longitudinal muscular bands gave way before this was completely accomplished. The invagination began at the ileo-cæcal valve; about two inches of the ileum passed through this into the cæcum, this then passed into the colon, and the latter was invaginated into itself. The invaginated portion was composed of two inches of the ileum, the cæcum, and six inches of the colon. The age of the child made the case of more than usual interest.

Of somewhat over ninety cases reported by Smith and West, only three of the patients were under three months of age, while nearly one half of them were between the ages of three and twelve months. The small size and somewhat unusual position of the tumor would have made the diagnosis difficult even before tympanites developed.

The CHAIRMAN remarked that he had seen often, in autopsies on very young infants, multiple intussusceptions, which were slight, easily reduced, and probably produced by the death throes, as they seemed to have nothing to do with the cause of death.

L. EMMETT HOLT, M. D., *Secretary*.

Reports on the Progress of Medicine.

OPHTHALMOLOGY.

By CHARLES STEDMAN BULL, M. D.,

LECTURER ON OPHTHALMOLOGY AND OTOTOLOGY IN THE BELLEVUE HOSPITAL MEDICAL COLLEGE; SURGEON TO THE NEW YORK EYE AND EAR INFIRMARY; OPHTHALMIC SURGEON TO ST. MARY'S FREE HOSPITAL FOR CHILDREN, AND TO THE NURSERY AND CHILD'S HOSPITAL.

(Concluded from p. 423.)

XEROSIS OF THE CONJUNCTIVA AND CORNEA IN SMALL CHILDREN.—Leber ("Archiv für Ophthalmologie," xxix, 1) makes the following preliminary statement of the results of his observations upon this subject: 1. The epithelial scales of the desquamating conjunctiva are covered, sometimes completely, by peculiar fungi, partly in the shape of bacilli, partly in the shape of micrococci. The same fungi are to be found in the covering of the corneal ulcers, as well as inside the suppurating eyeballs. 2. Introduction of a quantity of the fungi cultivated upon gelatin into the conjunctival cul-de-sac of rabbits, without wounding the conjunctiva, caused a severe ulcerating lesion of the cornea, which lasted for some days and then healed. In the corneal parenchyma small stellate colonies of these fungi were found. 3. Defective nutrition could not be regarded as the cause in Leber's case, because the child showed no signs of it until after the appearance of the eye lesion. The plantation of the fungi could not be caused by a previous desiccation of the eye, for the closure of the lids was perfect, and they were kept closed from the beginning of the disease. 4. The child died of bronchopneumonia, and at the autopsy the brain was found perfectly normal. In the pelves of the kidneys there was a desquamative

epithelial lesion which strongly resembled the xerosis of the conjunctiva. The peculiar fungus was also present. There was no other change in the kidneys. It is probable that the change in the pelves of the kidneys was secondary to an excretory infection.

HYDROCEPHALUS WITH INFLAMMATORY ATROPHY OF THE OPTIC NERVE.—Leber ("Archiv für Ophthalmologie," xxix, 1) reports a case of this nature in a young girl, aged fifteen and a half, and then reviews the five cases hitherto published. In these cases there was an almost exactly similar group of symptoms: a continuous flow of a watery fluid from the nose, in connection with long-continued severe brain symptoms, headache, epileptic attacks, vomiting, somnolence, attacks of unconsciousness, delirium, pronounced amblyopia, and blindness of both eyes from papillitis or its termination in atrophy of the optic nerve. In Leber's own case there was complete anosmia. In Nettleship's case there was partial anosmia, palpitation of the heart, and exophthalmus, and in Baxter's case there was hypertrophy of the thyroid gland. Leber thinks that the brain symptoms and blindness were due to hydrocephalus internus. An examination of the excreted fluid led him to regard it as cerebro-spinal fluid. This generally flowed from the left nostril.

VARIATIONS IN THE DIAMETER OF THE SENSIBLE IMAGE OF A LUMINOUS POINT.—Leroy ("Archives d'ophtalmologie," May-June, 1883) gives here the principal factors upon which his theory rests, which he considers necessary in view of certain criticisms made upon his work by Charpentier. The first or physical factor is that the image of a point is always a certain surface, the illumination of which diminishes from center toward periphery, where it tends to zero. The retinal surface on which this image rests has always a certain intensity, maxima in the direction of the regularly refracted rays, and sensibly constant in the limits of the image. The physiological factor is Aubert's law. He then formulates the following proposition: When the pupillary diameter has a certain invariable value, and when the intensity of the luminous point observed is indefinitely diminished and even supposed to be placed in a space theoretically obscure, the diameter of the image sensibly diminishes and tends to zero. As a corollary to this, if a sufficiently small intensity is given to the luminous point, the diameter of its sensible image will be sensibly *nil*, no matter what the pupillary diameter may be.

THE EFFECTS OF STRONG LIGHT UPON THE EYE.—Little ("Ophthalmic Review," July, 1883) reports two cases showing the effect of strong light upon the eye. The first was the case of a gentleman whose right eye had been exposed suddenly and for a moment to a very strong electric light. He was blinded for several minutes, and he suffered from intolerance of light and severe headache for some days. He complained of a mist and dark specks before the right eye, with vision of $\frac{2}{100}$. There was a distinct haziness over the optic disc and neighboring retina. The second case was of blepharospasm caused by lightning. A gentleman, aged fifty-six, while walking, was struck down by lightning, but was not rendered insensible. On rising, he found he could not open his eyes. Two days later Little saw him, and found marked blepharospasm in both eyes. He said his eyes were hot and painful. He remained in this condition for thirteen days, when he opened his eyes partially. He then steadily improved, and ultimately recovered with good vision and a normal fundus.

THE TRACHOMATOUS PROCESS.—Mandelstamm ("Archiv für Ophthalmologie," xxix, 1) has contributed an interesting article to the literature of trachoma. He formulates his reasons for declining to regard the disease as a specific one as follows: 1. There are no specific structures in trachoma, no "trachoma grains," which stamp the disease as specific. The structures

which are called "trachoma grains" are follicles or groups of lymph-cells, which are met with also in simple oedematous catarrh, in so-called "follicular catarrh"; in the catarrhal inflammations which accompany scrofulous diseases of the cornea; in those which are produced by inflammation of the lachrymal sac; in traumatic conjunctivitis; and in that form of conjunctivitis produced by atropine. There is no pathological product present in trachoma which is not met with in other conjunctival diseases. What Saenisch has called the "trachoma grain," and which is said always to lead to the formation of cicatricial tissue, is nothing but proliferation in a papilla, which may either disappear without a trace or may remain until cicatrization begins to develop in the conjunctiva. 2. Acute follicular catarrh and acute trachoma, according to the devotees of dualism, can not be distinguished from each other, either clinically or histologically. Although inflamed mucous membranes, in which follicles are present in great numbers, very often heal without a trace of proliferation, yet almost as many cases occur in which these follicles are replaced by hypertrophic papillae or overgrown by them, and in which affections of the cornea, opacities, and pannus are developed before our eyes. In some cases, in which the follicles were few in number and confined to the lower lid, while in the upper lid there was proliferation of the papillae, cicatrices developed in the lower lid in consequence of the protracted inflammation. On the other hand, cases are frequently observed of the so-called "papillary trachoma" or "trachoma grains" with pannus, which disappear without leaving a trace behind of cicatricial proliferation, though there may be a greater vulnerability or tendency to relapses, such as is frequently met with in corneal affections. To the objection that cicatrices possibly exist even here which have escaped observation, we may answer, Where, then, is the proof that the so-called "follicular catarrh" does not leave scars behind which are only seen by microscopical examination, and are entirely hidden from macroscopical observation? If we regard trachoma as a simple inflammatory process, with acute or chronic course, then the cicatricial formation in trachoma loses its specific significance, just as does the epithelial proliferation which may or may not be met with. 3. The presence of micrococci in trachomatous conjunctivæ is rather against the specific character of trachoma than in its favor; for as soon as the same micrococcus is met with in blenorrhœa, and is found to excite an inflammation by inoculation, which clinically is like a follicular catarrh, then this same micrococcus is in a position merely to cause an inflammation in the mucous membrane, without being accountable for the consequences. 4. No physician, no matter how many cases of trachoma he may have seen and treated, can affirm with any certainty what may result from an inflamed conjunctiva, where only follicles are visible; whether the disease runs an acute or a chronic course, with or without cicatricial formation. Therefore there is no clinical fact which will facilitate a differentiation of follicular catarrh from trachoma, even though the two may possess a histological identity.

VISUAL ILLUSIONS.—Mayerhausen ("Klin. Mon. für Augenheilkunde," July, 1883) begins his paper with Heuse's assertion in regard to the production of the illusion presented by Zöllner's test—that the appearance is so developed as if the inferior angle inclosed the succeeding one, and hence were larger; just as every inclosing body is greater than the body inclosed. Mayerhausen agrees with this idea, provided that the difference in size between the given and added figures does not overstep a fixed limit. We learn to consider the space lying between the figures which lie one within the other, in a certain sense, as the resultant figure by comparison; and this resultant figure, which in the one case surrounds the original figure, and in the other is inclosed within it, seems to be either entirely larger or entirely

smaller than the original figure. The paper is well illustrated by diagrams.

EXPERIMENTAL KERATITIS AND ITS BEARING UPON STRICKER'S THEORY OF INFLAMMATION.—Minor ("Am. Jour. of the Med. Sciences," July, 1883) has been experimenting in inducing inflammation in the cornea, and gives the following results of his observations: He believes that Stricker is correct in claiming that in silver-stained cornea, the mosaic tracings indicate the outlines of pus-cells, but that he is wrong in his conclusions as to their origin, and that he will continue to be mistaken so long as he confines himself to a single staining (silver). He limits his study to the eschar and its immediate vicinity, because silver-stained specimens show changes in no other locality. Minor claims to have established the immigration theory; because the pus-cells are similar in appearance to the white blood-corpuscles, they can be traced from the corneal periphery to the point of irritation; and, having also gained access to the corneal tissue through the eschar, they are most abundant immediately around this center, where dead but intact corneal corpuscles may still be recognized. The corneal corpuscles show signs of proliferation some time after the eel-immigration has set in; and this proliferation gives rise, not to pus-cells, but to new corneal corpuscles, and they are strictly limited to the zone surrounding the dead corneal corpuscles, whereas leucocytes or pus-cells in abundance can be found in various parts of the cornea, at a distance from this point.

INFLAMMATION OF THE RETRO-OCULAR CELLULAR TUNIC.—Panas ("Archives d'ophtalmologie," May-June, 1883) goes into the history of what is barbarously called "tenonitis," and then gives his own views of the pathology of the disease. The first symptom is intense circum-orbital pain, coming on in paroxysms; the course followed by the lancinating pain is always localized in the branches of the ophthalmic branch of the fifth nerve, the supra-orbital and nasal. An especially characteristic symptom is the extreme pain caused by any movement of the eyeball; the patients, therefore, usually keep the eyelids closed and the eyes immovable. On the second or third day, sometimes later, when the circum-orbital and orbital pain has reached its height, there appears a characteristic symptom in the chemosis or serous oedema of the ocular conjunctiva, around the cornea. It first appears in the inferior cul-de-sac, and thence extends all round the cornea. When the chemosis is very pronounced, the swollen conjunctiva sometimes becomes reddened and inflamed. This conjunctival phlegmasia is only fortuitous and secondary, and may not occur throughout the entire course of the disease. The pain caused by movements of the eyeball is explained by remembering that the inflammation of the retro-bulbar connective tissue is propagated necessarily into the muscular sheaths, which are themselves composed of loose cellular tissue in direct communication with that of the capsule of the eyeball. The engorgement and serous infiltration of the capsule of the globe causes a certain degree of exophthalmus. An ophthalmoscopic examination shows dilatation of the retinal veins, and sometimes a venous pulse. There is nothing noticeable about the condition of the pupil, which reacts both to light and to atropia; hence we conclude that the motor ciliary nerves are not influenced by the disease. The duration of the disease varies between two and three weeks. It always terminates by resolution. Among the constitutional causes are certain fevers, like scarlatina and measles and mumps. Arthritic rheumatism, however, is the principal cause. In the treatment, Panas recommends the salicylate of sodium, in doses of four to five grammes daily, and, when the pain is severe, hypodermic injections of morphine. If the chemosis is marked, he scarifies the conjunctiva and uses hot, emollient applications. He thinks that a pressure-bandage also

aids in the absorption of the chemosis and in the resolution of the inflammatory process.

A NEW FORM OF EYE-BANDAGE.—Peschel ("Arch. f. Augenheilk.," xii, 4) has invented a new variety of bandage for the purpose of applying a continuous bath to the eye, hoping thus to obtain as complete disinfection as possible. He has a sort of rubber mask constructed, which can be applied water-tight to the face below the eyes, against the temples, and over the nose, by means of a flexible metallic bow or arch, and an air-bag beneath it. This mask is open upward toward the forehead, and in a sitting posture the patient can thus keep the eyes continually immersed. This mask-bandage is constructed of three shapes: for the right eye, for the left eye, and for both eyes. Since September, 1882, Peschel has employed the apparatus in a great many cases, partly to destroy certain organisms already present, and partly to prevent their introduction from without; and the results have been most satisfactory.

THE QUESTION OF THE ERYTHROPSIA OF APHAKIAL EYES.—Purtscher ("Centralblatt für praktische Augenheilkunde," June, 1883) reports a number of cases of erythropsia after operation for cataract, occurring in his own practice and in that of several of his colleagues. He mentions first two cases occurring in the practice of Hirschberg, and then two occurring in his own practice, and also refers to one case reported by Hirschler and one reported by Dimmer. From an examination of these six cases he concludes: 1. That this form of erythropsia can not be an optical phenomenon. Color-dispersion can not be regarded as a cause, for objects themselves, and not alone their edges, appear red. Hence only two theories are thinkable: Either the cause must lie in cloudy media which admit the passage of red light, or it must be sought in vitreous or retinal hæmorrhages. Both these theories are, however, inapplicable to Purtscher's cases, because in none of them was there ever any diminution of the visual acuity. No positive result was ever gained by an ophthalmoscopic examination. 2. That the appearance of erythropsia in aphakial eyes is not connected with the existence of a coloboma as such, and therefore can not be regarded as occurring exclusively after an extraction by Graefe's method. 3. That any attempt at explanation on the basis of color-contrasts does not accord with the facts. 4. That Hirschler's attempt at explanation is based on physiological grounds. Hirschler thinks that the erythropsia of aphakial eyes is due to a fatigue of the retina, which is most noticeable in the evening, and more so for highly refrangible rays than for rays of slight refrangibility. Aubert assumes that the sensibility for blue or green is lost after wearing dark-blue or dark-green glasses for ten minutes, but that sensibility for red lasts for several hours. It might be assumed also that a very rapidly fatigued retina would lose the sensibility for the more refrangible rays of diffuse light sooner than the sensibility for the less refrangible red rays. It should also be remembered that among pigment colors red is recognized by a low grade of illumination when all other colors are unrecognizable. If it is true that erythropsia is more apt to occur by diminished illumination, the phenomenon would be more likely to occur in closed rooms and in the evening. 4. That the phenomenon of erythropsia in aphakial eyes is purely subjective, and situated in the light-perceptive apparatus. It is partly directly, partly indirectly, dependent upon nerve influence. We may assume with certainty that a retina which has been protected for a long time from the effect of bright light by a cataract would be in a condition of much greater irritability after the removal of the cataract. But its disposition to fatigue would be also so much the greater. Purtscher thinks that this fatigue of the retina is by no means the only cause of this erythropsia, but that we must look also to the most varying nervous influences for producing such a condition of fatigue. It is not

at all improbable that an unusually bright light, falling through the pupils on opening the eyes after sleep, may complete the exhaustion of a retina already fatigued.

CATARRAHAL CONJUNCTIVITIS WITH CONSECUTIVE ARTHRITIS.—Robert ("Recueil d'ophthal.," July, 1883) reports a number of cases of conjunctivitis followed by arthritic rheumatism in which the conjunctival disease was characterized by an oedematous swelling and purplish color of the eyelids, muco-purulent secretion, intense redness of the palpebral and ocular conjunctiva with some chemosis, continual lachrymation, sharp, shooting pains, and photophobia. This conjunctivitis, after several days of treatment, seems to terminate favorably, but there soon appear signs of inflammation in one or more joints, which resemble strongly the blenorragic arthritis. Robert thinks that this is a complex catarrhal affection developed under the influence of special atmospheric conditions.

EYE COMPLICATIONS AND VISUAL DISTURBANCES IN TABES DORSALIS.—Schmeichler ("Arch. f. Augenheilk.," xii, 4) gives the following *résumé* of his observations upon this subject: 1. The atrophy of the optic nerve is marked by the sharply defined discolored disc with its peculiar condition of its vessels; by the at first rapid, afterward gradual, diminution of vision; by the concentric limitation of the visual field; by the characteristic condition of the color-sense. 2. The disturbances in the condition of the pupil consist in reflex and total immobility of the pupil, in the myosis which is fixed against atropine action, and in the dissimilarity of the pupils. 3. The paralyses of the ocular muscles appear gradually and disappear slowly; they seldom last through life; they may appear again after their complete disappearance; and they are never met with in any other lesion of the spinal cord.

ON THE NATURE OF THE JEQUIRITIC OPHTHALMIA.—Sattler ("Kl. Mon. f. Augenheilk.," June, 1883) has gone very fully into the nature of the process set up in a trachomatous conjunctiva by an infusion of the jequirity bean. He used infusions of the same strength as Wecker employed, and found that there was a stage of incubation of about three hours between the application of the infusion and the appearance of the first subjective and objective symptoms. The symptoms at first increase slowly, then more rapidly to a considerable height, so that, within sixteen hours after a single copious application of a good infusion, all the signs of a severe conjunctivitis were present. From twelve to sixteen hours later, with never more than a single daily application, the process has reached its height, remains at this point for a day or two longer, and then begins to subside. The membrane is then more easily stripped off from the tarsal portion of the conjunctiva; but it is still very thick in the retro-tarsal folds, and very adherent to the parts. The secretion is abundant and purulent. On the fifth or sixth day the formation of a membrane upon the palpebral conjunctiva ceases; but a number of weeks elapse before all signs of redness, unevenness, and yellowish discoloration of the conjunctiva have disappeared. In some cases, at the height of the inflammatory process, superficial clouding and dullness of the cornea, with loss of epithelium, make their appearance; but, if the infusion is not applied more than once a day, these corneal symptoms do not lead to anything serious. The intensity and duration of the inflammation may be markedly increased by a number of applications, especially if they are made somewhat rapidly, one after the other. By shortening the period of maceration of the beans to from three to six hours, a less violent conjunctivitis is produced. Increased concentration of the infusion makes it more active; but not the slightest proportional relation exists between increased concentration and increased intensity of inflammation. The effect of the infusion diminishes visibly with age, and finally disappears entirely. A very marked diminution of its activity

also occurs when the maceration takes place in a hatching-oven at a temperature of 32° to 35° C., while its preparation with iced water, and standing for twenty-four days in a refrigerator, makes no perceptible difference in its activity. The microscopical examination of the infusion *always* showed the unmistakable forms of schizo-mycetes, or cleft fungus, which must be classed as a bacillus, which existed in enormous numbers in the fluid. In the purulent secretion of the conjunctiva, as well as in the membranes stripped from the latter, the same bacilli were found, in the spore-bearing stage, but never in very considerable numbers. The secretion of the jequiritic ophthalmia, when introduced repeatedly into the conjunctival sac of another eye, produced a conjunctivitis which resembled the original inflammation, but was very much less intense. Bacilli-bearing spores were more abundant in the infiltrated conjunctiva, as well as in the sub-conjunctival tissue of the retro-tarsal folds, which was enormously infiltrated with a fibrinous and cellular exudation. Sattler undertook to make the jequirity-infusion free from germs by boiling, but in this he did not entirely succeed. By adding to the infusion of jequirity a solution of bichloride of mercury of the strength of one part in 10,000, the infusion was sterilized so far as the production of bacilli was concerned; but its application caused an intense conjunctivitis, which could not possibly be due to the sublimate, which is constantly used in the same strength as a disinfectant. Hence, the cause of the ophthalmia must be sought in the jequirity. The bacilli were prevented by the sublimate solution from germinating, but they were not robbed of their irritating qualities. The question whether the power of the jequirity-infusion to produce a peculiar kind of conjunctivitis depends upon the presence of the germ of a distinct bacillus, Sattler regards as answered definitely in the affirmative. He then considers the question whether this bacillus, entirely separated from the original mother-liquor, still possesses the same pathogenetic properties, and this, after due experimental observation, he answers decidedly in the negative.

THE CLINICAL USE OF JEQUIRITY.—Wecker ("Annales d'oculistique," May-June, 1883) lays down three propositions as to the value of jequirity in ophthalmic practice for consideration. 1. Lotions of an infusion of the grains of jequirity certainly give rise to a purulent ophthalmia of a croupous nature, the intensity of which may be regulated by the number of lotions and the strength of the solution employed. In cases of slightly developed granulations and slight pannus, he advises the use of frequent lotions (thrice daily for three or more days), with an infusion of two- or three-per-cent. strength. In cases of ulceration or infiltration of the cornea, a two-per-cent. solution should be used. If the granulations are very thick and chronic, and there is a high grade of pannus, he thinks it advisable to produce an active inflammation as rapidly as possible by employing a five-per-cent. solution two or three times a day. These lotions should not, however, be employed simultaneously on both eyes, because of the pain occasioned during four or five days, and because, owing to the extreme swelling and hardness of the lids as well as to the presence of masses of fibrin covering the entire extent of the conjunctiva and eyeball, the condition of the cornea can not be recognized. With the strong solutions may be obtained a real, virulent inflammation, extending to the lymphatic glands, which is sufficient to kill certain animals and to cause a phlegmonous inflammation of the most serious nature. 2. The cornea runs no risk during the evolution of the jequiritic ophthalmia, provided the number of the lotions be not too greatly increased, and do not succeed each other too rapidly, especially if the five-per-cent. solution be employed. Grave corneal complications have been observed when numerous lotions of the strong maceration have been employed within a

short space of time. These complications may be avoided by using a very limited number of lotions, and by waiting until each lotion has produced its maximum effect—that is, from sixteen to twenty-four hours—before applying a second lotion. 3. The jequiritic ophthalmia, without doubt, destroys the granulations very rapidly, if care is observed in the manner of making the applications.

JEQUIRITY IN ALGERIA.—Sédan ("Recueil d'ophtalmologie," June, 1883), in a short article upon the new remedy for certain forms of conjunctival granulations, takes occasion to differ from the very satisfactory reports hitherto published of the efficacy of jequirity. He has sometimes met with good results, as perfect as those gained by other methods of treatment, and he admits that the proportion of failures from its use has been no greater than that from sulphate of copper, tannin, or lead. He has found great differences in the specimens of beans, and as great differences in the strength of the various macerations. In view of this certainty of inequality of composition, he thinks there is nothing surprising in the difference in results. In sixteen cases treated at Coleah, in Algeria, three proved successful. Seven cases were benefited. In six others, the inflammation produced was either slight or nil—in all insufficient. Severe pain followed after the fifth lotion, one case was badly aggravated, and in one case a chronic keratitis became acute, and would probably end in a perforation.

A MODE OF ILLUMINATING THE PERIMETER.—Priestley Smith ("Ophthalmic Review," July, 1883) offers the following plan of illuminating the perimeter: Upon the glass chimney of an ophthalmoscopic lamp he hangs a light piece of tin, which embraces it half way round, and reflects the whole of the light backward upon the wall. The wall behind the lamp is papered white over an area of about four feet square, and this white surface, being strongly illuminated, throws forward a diffused light around the patient's head, which gives a fairly equal illumination over the whole of the visual field. All other light being excluded from the room, there is a background of darkness, against which the test object stands out clearly. The center of the white area on the wall corresponds in height with the patient's head. For ophthalmoscopic purposes, a black curtain hangs over the whitened area of the world; when the perimeter is to be used, this is drawn aside, and the screen, already described, is hung upon the chimney of the lamp.

THE PATHOGENESIS OF DETACHMENT OF THE RETINA.—Stilling ("Archiv für Augenheilkunde," xii, 3) reports the case of a young blacksmith who had lost the sight of the right eye from a perforation of the ball by a fragment of iron. The eye was irritable, but the media were sufficiently transient for him to make out an extensive detachment of the retina. The eyeball was enucleated, and immediately examined by careful dissection under water. Stilling was convinced, after a careful examination, that in this case the detachment of the retina was not caused by the perforation or by the traction of individual bands of connective tissue, but rather in consequence of a condensation of the entire vitreous, which caused the irregular, relief-map-like appearance of its external surface, and exerted traction on the retina on all sides.

THE ADVANTAGES OF THE PLANE OPHTHALMOSCOPIC MIRROR IN RETINOSCOPY.—Story ("Ophthalmic Review," August, 1883) asserts that with a concave mirror retinoscopy can not be satisfactorily carried out at a greater distance from the patient than 1 mm. 20 ctm., or thereabouts, so that all degrees of myopia less than D. 1 exhibit hypermetropic movements of the shadows. With a plane mirror, however, sufficient light can be obtained to examine through a fairly dilated pupil at 4.5 mm., or even further than that from the patient, so that, except in degrees of myopia below D. 0.25, myopic movement can be observed.

Myopia of less than D. 0.25 may be treated as emmetropia. When, then, with a plane mirror at a distance of 4.5 mm., we find the hypermetropic movement, we conclude that there is no myopia, and in estimating the amount of ametropia we have no additions or subtractions to make, but declare at once that the weakest concave glass which produces hypermetropic movement is the measure of the myopia, and the strongest convex glass which allows the same movement is the measure of the hypermetropia. When the plane mirror is used in retinoscopy, the motions observed happen to be the same as those of the disc and blood-vessels in the method of testing refraction by the use of the mirror alone—viz., in the same direction as the observer or the mirror moves in hypermetropia, and in the opposite direction in myopia. This method, as has been also mentioned by Chibret, certainly enables the observer to approximately determine the degree of myopia, if myopia be present, in a shorter time than it can be done by any other method. An approximate estimation of the amount of ametropia can also be made by noticing the rate of the movement, the degree of luminosity, and the curvature of the shadows on each side of the illuminated area. Story recapitulates the following points of advantage: 1. In using a plane mirror for retinoscopy, stand as far from the patient as the illumination admits, and with a large pupil this distance may be as great as 4.5 mm. 2. If at the distance of 4.5 mm. the light and shadows move in the same direction as the mirror, the case is one of hypermetropia or emmetropia. 3. If they move in the direction opposite to that of the mirror, the case is one of myopia. 4. The brighter and smaller the image of the light on the patient's retina, and the faster it moves, the nearer is the refraction to emmetropia. 5. In correcting, the weakest concave glass which produces a movement with the mirror is the measure of the myopia, and the strongest convex glass which still permits of this movement is the measure of the hypermetropia.

CORNEAL GANGRENE PRODUCED BY INANITION.—Thalberg ("Arch. of Ophthalmology," xii, 2) observed most of his cases of corneal gangrene in sucklings. The corneal disease was generally bilateral, and was preceded by a more or less pronounced xerosis of the ocular conjunctiva. The most frequent cause appeared to be malnutrition of the child, coinciding in time with anæmia or fasting in its nursing mother. In some of the cases, however, the cause appeared to be a disease in the child only, such as entero-catarrh or pneumonia. In a part of the cases, after the occurrence of a slight xerosis of the conjunctiva, suddenly the entire surface of both corneæ became dull and clouded, and broke down into a soft, yellow mass, the condition extending in a few days down to Descemet's membrane. In another class of cases there existed for some time a decided xerosis of the conjunctiva or of the cornea, while the clouding, softening, and disintegration began at the corneal margin, and only at certain places penetrated quickly the corneal substance. The necrosis here began by a uniform superficial clouding of both corneæ, either simultaneously or one shortly after the other. Simultaneously with this superficial clouding, grayish-white spots appeared at the center or near the margin of the cornea, which soon assumed a yellow color, and began to break down into minute shreds of mortified tissue. From these points the destruction spread rapidly over the entire cornea. In other cases a milk-white stripe appeared, running across the cornea. The next day the tissue covered by this stripe turned yellow and began to break down, while the clouding of the other parts began to appear. In all the cases the corneal tissue was nearly completely destroyed within three or four days. The result was either phthisis bulbi or corneal staphyloma. Incipient gangrene of the cornea was several times observed in the Military Hospital as a consequence of severe constitutional diseases, such as

typhoid fever, scurvy, and profuse diarrhœa, following ulceration of the intestines. It appeared either upon one or both corneæ, preceded by a dryness and superficial clouding, with or without noticeable xerosis of the conjunctiva. Thalberg found eserine very useful in the treatment of this corneal gangrene. He used it in the form of a vaseline ointment in the proportion of 0.05 to 8.0. The vaseline soothed the unpleasant feeling of dryness, and caused a temporary disappearance of the xerosis.

THE ÆTIOLOGY OF MYOPIA.—Tscherning ("Archiv für Ophthalmologie," xxix, 1) finds that excessive degrees of myopia—that is, greater than D. 9—are found much oftener in the lower classes than in the higher, and this is especially so among women. Near-work plays an important rôle in the causation of myopia of moderate degrees, but the higher degrees of myopia, D. 9 and over, are entirely independent of near-work as a cause. The problem of measuring the focal length of the refractive media and the axis of the eye in the living person still needs solution. The question whether the myopia depends upon an increased curvature of the lenticular surfaces is still unsettled, though our present knowledge seems to point to the contrary. The question of the accommodation still remains where Helmholtz left it. The assertion as to the significance of the iris in accommodation is not tenable, for both the theoretical view of the subject and the observations of von Graefe of a perfect accommodation with total acquired aniridia are wholly against it. Another circumstance which weakens the theory is that it takes no note of the peculiar structure of the ciliary muscle. A defect in our knowledge of the act of accommodation is the slight acquaintance we have with the innervation of the ciliary muscle. Tscherning divides typical myopia into the following three forms: 1. A form of myopia which depends upon an "accidental" disproportion between the focal length of the refractive media and the length of the axis of the eye. 2. A functional myopia, produced by near-work, but without any diseased condition of the eye. 3. A form of myopia which is a real disease, *sui generis*, the nature of which must perhaps be sought for in an insidious choroiditis.

IODOFORM IN OPHTHALMIC THERAPEUTICS.—Vossius ("Archiv für Ophthalmologie," xxix, 1) recommends iodoform in all ulcerative processes of the cornea, especially in ulcus serpens. The earlier the case applies for treatment, the more rapid and favorable is the effect. Its use is not contra-indicated by any complications of the iris. He also advises its use as an antiseptic in all superficial and deep, accidental and artificial wounds of the conjunctiva and cornea, as well as in wounds of the sclera. He has but rarely noticed any evil effects from its use, and never any abscess of the conjunctiva; nor has he ever met with the amblyopia spoken of by Hirschberg, and attributed by the latter to the use of this drug.

INJURIES OF THE EYE DUE TO A FALL.—Vossius ("Klin. Mon. für Augenheilkunde," July, 1883) reports a case of this nature occurring in a lad of seventeen years, who fell a distance of one metre and struck upon the tuberosities of both ischia, without loss of consciousness. No evil result was felt until the following morning on awaking, when he noticed a cloud before the right eye. On the third day this eye was entirely blind. On examination, there was no perception of light, the media were clear, and the fundus was normal. Nineteen days later the papilla became a little pale, and from this time on an atrophy of the disc slowly declared itself. Under the treatment of the artificial leech and hypodermic injections of pilocarpine, followed later by injections of strychnine, vision was restored to $\frac{2}{3}$ eccentrically. About a month after the accident symptoms of paralysis in the left leg made their appearance, and shortly after in the left arm. This paresis reached its height on May 28th, but never amounted to entire loss of locomotion of either limb,

and by November had entirely disappeared. The one-sided character of the atrophy and functional disturbance of the right eye appeared to point with certainty to a lesion of the optic nerve in front of the chiasm, while the normal appearance of the vessels of the fundus pointed to a location of the lesion behind the point of entrance of the central vessels. From the nature of the injury, a lesion of the optic nerve within the optic foramen, in consequence of a fracture of its bony walls, did not seem possible; and, moreover, after the fall, every symptom of a serious fracture at the base of the skull—such as loss of consciousness, headache, vomiting, vertigo, bleeding from nose, mouth, or ears, and subconjunctival hæmorrhage—was absent. On the other hand, the diagnosis of a slight fracture of the base of the skull in the vicinity of the right optic foramen was strengthened by the long-postponed appearance of left hemiplegia, which, although it disappeared, resembled closely a cerebral paralysis, with lesion of the island of Reil on the right side. The amaurosis, which was at first complete, was probably due to a partial separation of continuity of the optic nerve and compression of the remaining nerve fibers by a hæmorrhage around the trunk of the optic nerve or within its sheath. The partial restoration of function would necessarily follow absorption of the extravasation, while those fibers which had been lacerated or divided would not regain their functional power.

NEURASTHENIC ASTHENOPSIA AND SO-CALLED ANÆSTHESIA RETINÆ.—Wilbrand ("Archiv für Augenheilkunde," xii, 3) regards the so-called retinal anæsthesia as the expression of neurasthenic troubles, and as an analogous link in the chain of equivalent nervous symptoms occurring in other organs. In discussing the subject, he considers first the conditions of increased irritability and hyperæsthesia of other organs in comparison with analogous symptoms in the eyes accompanying them. The tendency to rapid fatigue is a marked symptom, which is occasionally accompanied by diminution or loss of the sense of smell, of the sense of hearing, and of the sense of sight. The latter is manifested in various ways, as follows: 1. A peculiar form of limitation of the field of vision; 2, rapid disappearance of the object of fixation; 3, diminution of the central acuity of vision; 4, occasional cloudy vision and transient scotomata; 5, loss of fixation of optical after-images; 6, loss of persistence in reading and working; 7, fatigue in the eyes and eyelids. The loss of persistence in working is due to a more rapid fatigue of the entire optical nervous apparatus, as well as of ocular muscles, especially the internal recti. In almost all these patients there exists a more or less pronounced insufficiency of the internal recti muscles. The duration of the attacks of cloudy vision is usually but a few minutes, and they appear like a gray veil before the eyes, or like smoke in the atmosphere. The transient diplopia and the temporary ptosis are caused by these conditions of fatigue or paresis. The very frequent occurrence of clonic blepharospasm with retinal anæsthesia is well known, and has frequently been mentioned. Wilbrand considers that the differential diagnosis between neurasthenic asthenopia and other serious pathological conditions, such as progressive atrophy of the optic nerve, glaucoma, and sympathetic ophthalmia, is comparatively easy, and presents no difficulties. These neurasthenic-asthenopic troubles, in general, seem to bring but little danger to the optic nervous apparatus, and hence the prognosis is to be regarded as favorable. The treatment must be both local and constitutional.

NIGHT-BLINDNESS FROM MIASMATIC INFLUENCES.—Zimmermann's cases ("Arch. of Ophthal.," xii, 2) were observed in a family of four children, who previously were all healthy. After taking a house in a low situation and close to a sewer, the father suddenly fell ill from typhoid fever, and the children were attacked by intermittent fever together with hemeralopia. The

ophthalmoscope showed no alteration of the fundus. The fever disappeared after administration of quinine, but the night-blindness persisted, despite all treatment, until the family had left the house and removed to a higher locality in a healthy part of the city. Then a rapid improvement was observed, and in two weeks the hemeralopia entirely disappeared and did not return.

SURGERY.

By CHARLES B. KELSEY, M.D.

POSTERIOR RHINOSCOPY.—Mr. W. J. Walsham ("Lancet," July 28, 1883) describes the following easy method of posterior rhinoscopy: A piece of soft, red rubber tubing, about one eighth of an inch in diameter, is introduced into one nostril and pushed very gently along the floor of the nose till it presents just below the soft palate. It is then gently seized with a forceps, drawn out through the mouth, and loosely tied across the upper lip to the end protruding from the nose, the elastic tube being stretched just sufficiently to loop the soft palate upward and forward, and draw it well away from the posterior wall of the pharynx. The looping of the palate on one side is often sufficient, but a better view is obtained by passing a tube through the other nostril and looping up the soft palate of that side in the same way. The posterior nares and naso-pharynx can now be examined with the ordinary laryngeal mirror with great facility. The introduction of the tube causes hardly any annoyance to the patient. Care, however, should be taken in passing the tube to let it only just present below the soft palate, as, if it is pressed further, it may impinge upon the lower pharynx and produce a tickling sensation or a desire to vomit.

EXCISION OF THE TONGUE.—Mr. G. E. Walker ("Liverpool Med.-Chir. Journal," July, 1883) advocates the following method of excising the tongue: The lower lip being drawn upward with the left hand so as to put the skin under the jaw on the stretch, an incision is made along the edge of the bone from angle to angle, making a V-shaped flap with a rounded angle. This flap is then dissected back. A large-handled needle, armed with a loop of silk, is then thrust through the tissues, at the right end of the incision, into the mouth, appearing just in front of the anterior palatine arch. By this loop the right of an *écraseur* wire is drawn back through the hole. On the left side the same thing is repeated, then the tongue is well drawn forward, and the wire, connected with the *écraseur*, rapidly tightened. The stump of the tongue should be secured to the jaw by a thread to prevent embarrassment in breathing. A knife is then thrust from below, just in front of the track of the needle, and with a sawing motion all the tissues of the floor of the mouth are separated from the bone. The whole of the parts are thus thrown open to examination. A single suture joins the apex of the flap to the skin, and the sides are left open for drainage.

SPINA BIFIDA TREATED BY INJECTION.—The following report, by Mr. N. Smith, of a case of spina bifida which had been cured by injection of iodine, is exceedingly interesting, proving, as it would seem to do, that an efficient closure of a deficiency in the vertebræ can be effected without encroachment on the spinal canal ("Lancet," August 4, 1883): The child was born with a deficiency of the arches of the lowest lumbar and upper sacral vertebræ. The size of the tumor was in circumference at the base $8\frac{1}{2}$ in., from side to side over the tumor $5\frac{1}{2}$ in., from above downward $4\frac{1}{2}$ in. The tumor was fully distended, translucent, and presented an ulcerated surface in the center, secreting fluid. There was no appearance of large nerves in the sac. The tumor was punctured with a No. 3 trocar, low down upon one side, and two ounces of clear, straw-colored fluid were drawn off, until the tumor was diminished to half its original size. Forty minims

of Dr. Morton's iodo-glycerin fluid were then injected, and the puncture was closed with collodion and plaster. The constitutional disturbance was severe for twenty-four hours, after which the tumor began to cicatrize, gradually shriveled up, and became like a piece of rough puckered leather. The operation was performed on the 5th of September, 1877, and in twenty-five days the tumor consisted only of rough thickened skin, which projected slightly beyond the surrounding surface. A part of the wall of the sac of about the size of a shilling remained apparently unaffected by the injection. In February, 1878, nearly six months after the operation, hydrocephalus made its appearance, and ran its course in two years, at the end of which time the child died.

Autopsy.—Externally, the remains of the tumor appeared as thickened and puckered skin, and resistant to the touch. At the center there was a small patch, less in size than a shilling, of thinner skin, beneath which could be felt a small cavity. Upon dissection, the remnant of the tumor was found to consist of very dense fibrous cicatricial tissue, in the form of fibers and bands passing in all directions, and closely united together. The deficiency in the wall of the spinal canal was blocked up by this cicatricial material, but with difficulty a very small probe could be passed along a tortuous passage leading from the small cavity already referred to to the canal. The cicatricial tissue did not extend beyond the opening into the canal, but it formed a remarkably firm wall in place of the deficiency in the bone. No nerves could be discovered passing from the canal to the wall of the sac.

LUMBAR COLOTOMY.—The following case of lumbar colotomy, reported by Mr. C. Lamminan ("Lancet," August 4, 1883), is important in so far as it helps to arrive at a conclusion regarding the value of the operation, which is as yet in its infancy. The patient, a woman, aged fifty-four, was in comparatively good health until seized rather suddenly with the usual signs of intestinal obstruction. The diagnosis presented all of the usual difficulties, there being no tumor to be felt either through the rectum or abdominal wall. An O'Beirne's tube seemed also to pass its full length, though after the operation it was evident this could not have been the case, as the stricture in the sigmoid flexure hardly admitted a probe. After the usual general treatment (purgation) had failed to afford relief, an operation was decided upon in consultation with Mr. Bryant, but the patient could not be brought to consent to its performance till she had passed seventeen days without nourishment by the stomach, and was, in consequence, much reduced. The usual incision in the left lumbar region was made and the dissection carried down to the lumbar fascia. This being divided, a large quantity of subcolic fat was discovered, through which the collapsed intestine was finally reached. The stricture was found just at the bottom of the incision. The intestine was opened just above the disease and fastened to the skin. A stout carbolized catgut ligature was placed around the bowel below the disease, and the cancer excised. The ends of the ligature were cut off and the lower end of the bowel was returned to the abdominal cavity. The patient rallied with difficulty from the operation, and died forty-eight hours after. The stricture proved to be scirrhus. There was no autopsy.

[The author states that since its introduction the operation has only been performed on one or two occasions—probably referring to Mr. Bryant's experience, who also advised and directed this operation. There are nine previous ones on record, this being the tenth; although the incisions have differed in nearly every case, some being in the median line, some in the inguinal, and some in the lumbar region. Mr. Bryant's seems to be the only previous case in which the incision has been the usual one for lumbar colotomy. Mr. Marshall first made a me-

dian incision, and subsequently one parallel with the last rib and one inch and a half above the posterior part of the crest of the ilium. Of the ten cases, five have been immediately fatal from the operation itself, and five have ended in recovery. Of the patients in these latter cases, one died in seven months, one in ten months, one was alive two years later, and in the other two the length of life is not reported. In deciding upon the propriety of the operation in any particular case, it would seem advisable to consider how long a life the patient is apt to have if not operated upon. For example, it would hardly seem good surgery to subject a patient to an operation the mortality of which is fifty per cent., and then have him die of a recurrence in seven months, when he might have lived seven months without the operation. The amount of actual obstruction caused by the disease must in many cases decide the propriety of surgical interference.]

Miscellany.

THE AMERICAN MEDICAL COLLEGE, OF ST. LOUIS, AND THE STATE BOARD OF HEALTH OF WEST VIRGINIA.—As bearing upon a matter which was made the subject of comment in our columns some months ago, we now publish the following documents:

Preamble and Resolutions of the American Medical College.—"At a meeting of the Board of Trustees of the American Medical College, of St. Louis, on Saturday, August 25, 1883, the following preamble and resolutions were offered and unanimously adopted:

"Whereas, J. W. Davis, of Charleston, W. Va., did, in the year 1881, represent to the Dean of the American Medical College, of St. Louis, Mo., that he, Davis, had previously attended thirteen months' medical lectures in the Medical Department of the University of Virginia, upon which attendance he claimed the privileges and rights of a second-course student, and asked to be admitted to the graduating class upon the attendance of one session in the American Medical College; and

"Whereas, The statements and papers submitted by said J. W. Davis were taken as sufficient evidence of the previous attendance claimed by said Davis, and J. W. Davis duly graduated by the American Medical College in 1881; and

"Whereas, It now appears, from evidence furnished by the State Board of Health of West Virginia, and from the recent reticence of said J. W. Davis upon the subject, that the representations of said J. W. Davis, in 1881, to the effect that he had previously attended medical lectures in the Medical Department of the University of Virginia, were false, and that he had not attended medical lectures anywhere previous to his attendance at the American Medical College in 1881; and

"Whereas, The State Board of Health of West Virginia, after granting said J. W. Davis a certificate upon the basis of the diploma from the American Medical College, did revoke said certificate on account of the manner in which said diploma was obtained (through the false representations of the said J. W. Davis); and

"Whereas, On account of suspicions regarding the status of the American Medical College resulting from the graduation of said J. W. Davis, said State Board of Health of West Virginia do refuse to grant a certificate of registration to Millard F. Hamilton, of Mannington, W. Va., upon a diploma from the American Medical College, issued in June, 1883; therefore

"Resolved, That the diploma of the said J. W. Davis, issued in 1881, by the American Medical College of St. Louis, be and the same is hereby revoked; and that the Secretary of the American Medical College be instructed to notify, as far as possible, boards of health throughout the country of this action.

"Resolved, That Millard F. Hamilton, of Mannington, W. Va., be and is hereby requested and advised to appear before the State Board

of Health of West Virginia for examination, it being understood that, if the said Millard F. Hamilton pass a satisfactory examination before said Board, he will be granted a certificate upon the basis of his diploma from the American Medical College.

"JACOB S. MERRELL,

"Pres. Board Trustees Amer. Med. College.

"Aug. 25, 1883.

"A. MERRELL,

"Sec'y Board Trustees Amer. Med. College."

"STATE BOARD OF HEALTH OF WEST VIRGINIA, }
"WHEELING, Aug. 29, 1883. }

"Professor Geo. C. Pitzer, M. D., Dean American Medical College, St. Louis.

"MY DEAR SIR: Your communication of the 25th inst., covering preamble and resolutions of the American Medical College, of St. Louis, has been received, and is satisfactory.

"Accepting this action of the trustees as an earnest of their good faith and the promise of a strict compliance with the standard of requirements of the State Board of Health of West Virginia in the matter of medical education, diplomas of the American Medical College will hereafter be recognized by the said Board as a sufficient basis for registration in West Virginia.

"It is proper, however, that this notice be given: The State Board of Health of West Virginia has resolved, and so ordered, that in all cases hereafter where a recognized medical college shall have been found guilty, under any pretext whatever, of departing from its published curriculum and declared standard of requirements for graduation, the college so offending, notwithstanding promises of future faithful adherence to its rules relating to attendance on lectures and conferring the degree of Doctor of Medicine, shall be put on probation in this: that its alumni who may apply for registration must answer satisfactorily, under oath, concerning actual attendance on lectures, and the manner in which they obtained their diplomas, before they, the said applicants and graduates, can be registered, or the college granting such degrees recognized in West Virginia.

"Very respectfully,

"JAMES E. REEVES, M. D.,

"Secretary."

It will be seen that the college acted the part of wisdom in the matter, and that the West Virginia board met that action in a spirit that, while it gives evidence that there is no probability of its relaxing its vigilance, ought to go far to strengthen the reputation it has already made for impartiality and discretion.

THE PHILADELPHIA MEDICAL CLUB.—A meeting of the newly organized association, known as the Philadelphia Medical Club, was held at the club-room, 923 Locust Street, on the 27th ult., the object being literary work and the encouragement of social relations. The following is a list of its members: Drs. Lewis K. Baldwin, J. M. Barton, J. R. T. Bell, W. R. D. Blackwood, Thomas H. Fenton, Addinell Hewson, Sr., H. S. Janney, P. D. Keyser, S. R. Knight, A. K. Minnich, S. P. Oliver, W. H. Pancoast, E. S. Perkins, F. M. Perkins, C. R. Prall, S. D. Risley, Carl Seiler, J. V. Shoemaker, W. S. Stewart, F. E. Stewart, W. M. Welch, Daniel E. Hughes, Frank Fisher, Benjamin F. Baer, L. Wolff, Henry Morris, Joseph D. Schoales, John G. Lee, John Aulde, H. F. Haugh, F. B. Hazel, M. L. Rickards, Philip Leidy, H. St. Clair Ash, H. T. Taylor, Rosh Leaman, George F. Shattuck, Alfred Jones, William B. Atkinson, William Gardiner, O. P. Rex, Horace Ladd, Joseph D. Nash, L. S. Clark, Charles M. Seltzer, James Graham, Napoleon Hickman, J. C. Wilson, George E. Stubbs, C. E. Sajous, C. V. Foster, Henry Leaman, J. G. Allen, Addinell Hewson, Jr., Charles Mitchell, A. B. Dunmire, Joseph H. Hearn, T. H. Andrews, William Thompson. The officers are: President, C. R. Prall; Vice-President, William M. Welch; Secretary, F. E. Stewart; Treasurer, Carl Seiler.—*Med. Bulletin.*

THOMSEN'S DISEASE.—This singular affection, called by the name of the physician who first observed it in himself and his family, can at present, thanks to the investigations of Thomsen, Leyden, Seeligmüller, Westphal, etc., be considered as a distinct disease, whose nature, however, still remains to be found; for, until now, microscopical researches have given a negative result. According to Thomsen, it is of psychical

nature; but Westphal considers it as a congenital disorder of the muscular tonicity, and Jacusiel as a congenital muscular hypertrophy. The disease is essentially hereditary, and follows other abnormal nervous manifestations. All the cases were congenital. The chief symptom is a spasmodic stiffness of certain muscles, appearing at the beginning of a movement. After the muscles of the legs have been at rest for some time, and the patient tries to get up, he feels suddenly a stiffness in the articulations of the legs, which are fixed by a tetanic contraction. This same stiffness shows itself also after violent muscular exercise, after certain complex movements, dancing, etc.; or after an unexpected sensation: when the patient is running, for example, if his foot comes into contact with a stone, it becomes rigidly fixed, and the patient stumbles, sometimes before he is able to save himself with his hands. M. Greffier, in the "France médicale," insists upon the important fact that the contraction only comes on at the beginning of a movement. When the movements have been repeated a certain number of times, the contraction disappears. It may be observed, also, in muscles supplied by cranial nerves, as in those of the tongue, face, and orbit. According to Thomsen, imagination and cold can produce the spasm, which disappears by a repetition of the movements. The sphincters are never implicated. The muscular hypertrophy may be absent; the muscular power, tendon-reflexes, sensibility of the skin, and electrical irritability of the muscles, are normal. It is, therefore, difficult to mistake this disease for locomotor ataxy or pseudo-hypertrophic paralysis; the latter is a true paralysis, and the former is characterized by permanent stiffness, abnormal excitability, excess of the patellar tendon-reflex, and, finally, by symptoms of spinal epilepsy.—*British Med. Jour.*

VARIATIONS OF THE URINARY CHLORIDES.—No one will deny that a more frequent examination of the constituents of the urine might lead to the acquisition of fresh knowledge. Even in our public clinical institutions the systematic estimation of the most important urinary constituent is not regularly carried out. A complete clinical account of the changes in the urine which attend the active stages of the rachitic process would probably be attended with important additions to medical science. Indeed, the same may be said of most acute diseases. In ordinary medical attainments perhaps the only piece of information with regard to the chlorides of the urine consists in the knowledge of the fact that there is a remarkable diminution of this ingredient in acute pneumonia. M. Burot has done well to draw attention to this unplowed field of clinical medicine. He has devised a simple apparatus for the purpose of estimating the chlorides. A small flask is furnished at its inferior extremity with an ampulla capable of holding just one cubic centimetre of urine. A pipette is obtained, gauged in tenths of a cubic centimetre. Another little flask containing a solution of argentic nitrate is used from which the pipette may suck up some of its contents by means of a ball of caoutchouc. A cubic centimetre of urine is first treated with a solution of potassic chromate. The solution of nitrate of silver of known strength is then dropped in by means of the pipette. The whole of the chlorides in the urine have been obtained as soon as the *café au lait* precipitate of chromate of silver appears. M. Burot found that the normal amount of chlorides in the urine was eleven grammes for every litre, consisting of ten grammes of chloride of sodium and one of chloride of calcium. In tuberculosis it was estimated that seventeen to eighteen grammes of chlorides per litre were discharged. But a diminution of the chlorides is of greater import, especially in acute affections. In pneumonia, when the temperature is much raised, the fall in chlorides is considerable. This diminution was not noted in broncho-pneumonia. But in the pneumonia of typhoid fever at the onset of death the chlorides completely vanished.—*Lancet.*

A NEW METHOD OF SEWER VENTILATION.—The description and drawings of an ingenious contrivance for ventilating sewers and purifying sewer-air have been forwarded to us. The idea seems so good that we regret we have not been able to see it practically applied, though it is stated that successful experiments have been made at Manchester. The apparatus is patented by Mr. T. S. Wilson, F. S. I., and Mr. H. T. Johnson, and is called the Patent Hygienic Furnace. Profiting by the proximity of the gas mains to the sewers, the paten-

tees have constructed a gas furnace to be inserted in the man-holes. The gas is introduced into a little chamber, where it is mixed with a due proportion of air and supplies some Bunsen burners. Immediately above the gas there are some fire-clay plates, which soon become heated; while above them are iron divisions. The heat naturally draws the air up from the sewer below; it passes through the Bunsen burners backward and forward over the fire-clay plates and iron divisions, till at last it finds its exit in the ventilation chamber, or man-hole, and hence through the grate into the street. The furnace not only causes a strong current of air from the sewer, but, as it is capable of being heated at from 600° to 700° Fahr., it should destroy all the germlife that travels with the sewer-gas. Experiments with sterilized infusions of meat have been made, and whereas ordinary air drawn from the street soon caused the infusions to become turbid with animalcula and fungoid life, no such effect was produced by the sewer-air taken after it had passed through this furnace. There is, however, one objection to furnaces when employed to ventilate sewers. They certainly produce a very active suction, but the effect, however energetic, only extends to a short distance. We would, therefore, suggest that these ventilating furnaces should be as small and as inexpensive as possible, so that a large number of them might be used, and these at very short intervals.—*Lancet.*

GREEN OYSTERS.—In the biological section of the recent meeting of the British Association for the Advancement of Science, at Southport, Professor Lankester, F. R. S., gave an account of an investigation he had made into the coloring matter of the green oyster. The cause of the green color in the oyster was decided fifty years ago by a French oyster-cultivator, who was in the habit of producing them for the Paris market. This gentleman found that in the ponds of Normandy, in which these oysters were produced, there was always a green deposit. He thought it was a vegetable substance, and called it *Vibrio ostrearis*. It had since been maintained that it resulted from the contact of the oyster with copper, and it had been alleged that cases of poisoning had in consequence occurred. The explanation, though plausible, as there were minute quantities of copper in the tissues of the oyster, was not the real one. The green substance to which he had referred had been found to be living protoplasm. It came from a microscopical organization known as the *Maviacula ostrearis*. This organism was swallowed, with the water, by the oyster, was absorbed into the blood, and the coloring matter was deposited on the surface of the gills and the labial tentacles. It imparted no particular flavor to the oyster, for he would defy any man to distinguish between the green oyster and the white one with his eyes shut.—*British Medical Journal.*

ARMY INTELLIGENCE.—*Official List of Changes of Officers serving in the Medical Department of the United States Army from October 27, 1883, to November 3, 1883.*—McKEE, JAMES C., Major and Surgeon. Relieved from duty in the Department of California and assigned to duty as Medical Director Department of the Columbia. Par. 5, S. O. 249, A. G. O., October 31, 1883. — PRICE, CURTIS E., Captain and Assistant Surgeon. Assigned to duty as Fort Custer, M. T. Par. 1, S. O. 187, Department of Dakota, October 25, 1883.

SOCIETY MEETINGS FOR THE COMING WEEK.—*Monday, November 12th:* New York Academy of Sciences (Section in Chemistry and Technology); New York Ophthalmological Society (private); New York Medico-Historical Society (private). *Tuesday, November 13th:* American Public Health Association (Detroit—first day); New York Surgical Society; East River Medical Association (private); Medical Societies of the Counties of Rensselaer and Ulster, N. Y.; Medical Society of the County of Camden, N. J.; Newark Medical Association (private); Jersey City Pathological Society; Trenton Medical Association (private). *Wednesday, November 14th:* American Public Health Association (second day); New York Pathological Society; American Microscopical Society of the City of New York; Medical Society of the County of Cayuga, N. Y. *Thursday, November 15th:* American Public Health Association (third day); New York Academy of Medicine. *Friday, November 16th:* American Public Health Association (fourth day).

Lectures and Addresses.

A MEMORIAL OF

FREDERICK D. LENTE, A. M., M. D.*

By T. HERRING BURCHARD, M. D.,

NEW YORK.

MR. PRESIDENT AND FELLOWS OF THE ACADEMY: So rapidly fly the hours that it is well to pause occasionally amid our haste and labors to note the changes that they bring.

This very evening a paper was to have been presented before this Academy by our esteemed associate, Dr. Frederick D. Lente.

It is my painful duty to announce that the appointment will not be kept. Again the remorseless scythe has been at work, and under the shadows of the Highlands, amid the scenes of busy and eventful years, our honored friend is sleeping the immortal sleep.

In many particulars Dr. Lente's professional career was anomalous, as his character was remarkable.

What our specific duty is, in the equation of life, must, from the very nature of things, ever remain a varying quantity. Our estimate of our personal duty, however, depends largely, if not chiefly, upon our personal capabilities of estimating the specific work required of us. Working simply for the work's sake—to kill time—however laudable the work may be, is not our idea of the highest devotion to duty. Our highest idea of duty is the highest *conception* of duty of which one's mind is capable.

He who has always lived in the valleys and has never trod the mountain-tops can have but a meager appreciation of unfolding panoramas of sleeping lakes and nestling villages, and the broadening far-off prospect beyond the hills. As he ascends, though, from one altitude to another, and his vision takes in a wider survey, his conceptions of "the far off, unattained, and dim" become changed, and vague surmises now give place to actual knowledge. But, as we ascend, the horizon recedes; "hills peep o'er hills, and Alps o'er Alps arise," and so to those choice minds of highest attainment are given broader vistas and wider fields for the employment of noble and generous deeds. And ever, as these adventurous climbers ascend, their eyes are gladdened and their hearts are cheered with loftier aspirations. Humanity rolls, like a mighty ocean, at their feet, and, though cold its waters and unfathomable its mysteries, they press higher and higher to fire the beacon lights.

Dr. Lente, modest, unpretentious, gentle as he was, stood on the very mountain-top, and from his exalted observation took in a broad conception of life, with all its incidental duties and obligations. Extreme *conscientiousness* might well be predicated of him as his predominant characteristic. Never have I met the man whose regard for truth was so immutable. The keenest justice, even in most

trivial matters, governed in all his dealings. Honor was dearer to him than life. His professional obligations to his patients, his sense of professional responsibility, he regarded as but second to his accountability to his God. Sensitive of the rights of others, as he was of his own integrity, neither intimidation nor reward could swerve him from his own high sense of right.

Slander and vituperation, ever venomous, ever foul, sink infinitely beneath contempt when incited by professional jealousy, bigotry, and pique. The vicious intolerance breathed against Dr. Lente at Saratoga, while it failed to seriously annoy him, did awaken his profound mortification that in his profession such narrow-mindedness and illiberality could be found.

Life with Dr. Lente meant work; to him it was full of achievable possibilities. Indefatigable as a student, retiring late and rising early, he turned to profit the midnight hours. Mere physical fatigue was no excuse with him for mental inactivity. So, when his tired limbs refused to carry him, often have I found him, late at night or in the early morning, bolstered in his bed, surrounded with his books and periodicals.

All that he did was done with rare thoroughness. Disdaining ostentatious display, and deprecating superficiality, the purpose of his studies was to make himself the master of his subject. Access to his thoughts meant more than mere intellectual acquaintance. His mind was a living thesaurus of information, facts, and theories, gathered with great discrimination from the widest domains of science and the arts. And yet, student as he was, his studies never led him into devious and idle speculation. He was extremely practical in all he did. Physically delicate, but with powers of endurance that were phenomenal, with an energy that was untiring and a devotion to duty that was sublime, he brought to the practice of his profession a mind of richest and most varied acquisitions, an experience that was remarkable for its variety and scope, and a heart ever mellowed with kindness and good cheer. As a diagnostician he was painstaking, thorough, and exact. Haphazard diagnosis he deplored, and no opportunity for brilliant display ever tempted him into the hasty expression of an immature opinion. As a therapist, his intimate acquaintance with drugs and his extensive studies in physiological medication made him, at once, skillful and distinguished. As a practitioner, his fertility of expedients is illustrated in numerous inventions, formulæ, and instruments in general professional use. In the widest sense of the word he was "the good physician"—skillful, devoted, self-sacrificing. Indifferent to his own infirmities, and oblivious of his personal comfort, he brought to his patient's relief a strong brain, a ripe experience, a tender heart. As a scholar, he was an active or honorary member of most of the leading societies. He was one of the founders and an early president of the American Academy of Medicine, and a frequent contributor to current popular or professional journalism. Whatever came from his pen commanded attention. His more important contributions were his papers on "The Treatment of Intermittent Fever by the Hypodermic Injec-

* Read before the New York Academy of Medicine, November 1, 1883.

tion of Quinine," "The Sedative Action of Calomel in Disease," "Intra-uterine Medication," etc.

Dr. Lente was born in Newbern, N. C., in 1823. He graduated from the University of North Carolina in 1845. He studied medicine in the office of our distinguished *confrère*, Professor Alfred C. Post, and graduated from the Medical Department of the New York University in '49. During the following two years he served as House Surgeon under Valentine Mott in the New York Hospital. In 1851, having been appointed Surgeon to the West Point Foundry, the Doctor removed to Cold Spring, where, in 1853, he married Mary, the accomplished daughter of William Kemble, Esq.

Mrs. Lente, one son and three daughters survive him.

Dr. Lente's professional career at Cold Spring was one of remarkable success. His reputation as consultant and surgeon reached literally from New York to Albany. So highly prized were the practical advantages of Dr. Lente's office that a popular question among New York and Bellevue Hospital men once was: "After leaving the hospital, is it Cold Spring or Europe?"

In 1870 the doctor received and accepted the appointment as professor of gynecology in the Medical Department of the New York University and assistant surgeon to the Woman's Hospital. After a year's arduous service in the city, interrupted by numerous professional calls up the Hudson, he returned to his former home, where he continued in active practice until failing health compelled him to seek a more genial climate.

Relinquishing a lucrative practice, he betook himself to Palatka, Fla., for the winter, and to Saratoga for the summer months.

It was at the latter place, and after a season of unusual activity and fatigue, that he was taken ill with cerebro-spinal meningitis. Fortunately he was able to return to his family at Cold Spring, where, on the 11th of October, in the sixtieth year of his age, he peacefully breathed his last.

And thus ends the record of a noble man. He dignified his manhood by his consistent Christian life, and to his profession he added luster and renown. What matters it to us how soon we follow, if we meet the final issue with as pure a life and as sublime a faith as did our illustrious friend?

SCARLATINAL RHEUMATISM.—In the course of some clinical remarks on scarlet fever, published in the "Lancet" for October 27th, Dr. Martin Oxley, of Liverpool, says: "Here I would say, with regard to the administration of salicylates, that I would not recommend them in this complication of scarlet fever, seeing that the joint affection is always very slight, both as regards swelling and pain, and that the skin and kidneys are both desquamating, and not in a fit condition to be called upon to do any extra work. I would rely more upon quinine and tincture of perchloride of iron in small doses, with the application of a blister over the heart where it is affected; or, if these are contra-indicated, carbonate of ammonia and chlorate of potash in small but frequent doses. In the treatment of scarlet fever our great care should be, as far as possible, to take every means to prevent the sequelæ; in the majority of cases there is not much difficulty, if the patient is kept in bed until the body has desquamated, and in a warm room for at least a week afterward, also to give a moderate amount of food, avoiding meat, keeping to a simple diet of milk, eggs, fish, stale bread, with milk, tea, coffee, and cocoa as a beverage."

Original Communications.

THE EMINENT DOMAIN OF SANITARY SCIENCE, AND THE USEFULNESS OF STATE BOARDS OF HEALTH

IN GUARDING THE PUBLIC WELFARE.*

BY JAMES E. REEVES, M. D.,

SECRETARY OF THE STATE BOARD OF HEALTH OF WEST VIRGINIA.

MR. PRESIDENT: I propose a few inquiries into the truth of a proposition which I consider vitally important not only to the State, but to the general interest of every social institution. The proposition to which I allude may, with some convenience, perhaps, be expressed in the following terms:

Without obedience to the laws of health, it is impossible to secure the highest culture of the citizen—physical, moral, and intellectual—and perpetuate the prosperity, freedom, and glory of the State.

Should I succeed in establishing the truth of this proposition, the labor of sanitarians will be more justly appreciated, as well as the immense agency exerted by State boards of health amid the restless activity and excitements of the social and political elements of our advancing and complex civilization.

The principles of sanitary science are not of modern origin. Indeed, they are as old as the Mosaic code, and their unerring rewards and penalties have marked the life-history of all the nations that have covered the earth. In their scope, they are wide enough to embrace all humanity, and just as applicable to communities of to-day as they were to the Jewish race thousands of years ago.

It may be truthfully said that the business of sanitary science begins and ends with man; but language has no single or compound word which fully expresses its varied relations—its social forces and necessities to human life and human society. Its aim is the growth of an improved race—a healthy life—a useful life—a happy life—and as long a life as possible. Commencing with utero-gestation, it compasses birth, infancy, childhood, adolescence, puberty, adult life, maturity; thence along the declivity to old age, and to death! Every influence of food and drinks, clothing, exercise, education, soil, and climate, comes within its purview. Good health, therefore, embraces *value* in the broadest sense of that term. On the individual it confers happiness, dignity, and a thousand advantages in the struggle of life. To the State it gives wealth, power, and freedom.

Public health ever goes hand in hand with true liberty, and is the companion of orderly habits and pure morals. During the fourteenth century, when vice and misrule in Europe had their greatest sway, and the beautiful fruits of civilization were trampled under foot by barbarian warriors; when acquisitions that had cost mankind ages of toil and millions of money were lost in the general wreck; when the night of ignorance was darkest, and human degradation

* Read before the American Public Health Association, at its annual meeting, held at Detroit, November 13 to 17, 1883.

sunk to the lowest depths—then hygiene was neglected, and plagues numerous and almost universal rested upon the people.

But this is only one of the many examples that could be adduced in proof that general health and longevity are inconsistent with ignorance and slavery. Greece, with the loss of her liberty and the ruin of her cities, has an altered climate, dating back, perhaps, from the years of the Peloponnesian War—more than four hundred years before the Christian era—when polished and populous Athens was devastated by fire and sword, and plagues followed in the train to complete the horrors of her lamentable desolation and downfall!

In London, about the middle of the sixteenth century, the population was estimated at half a million, and the average duration of life was only twenty-five years—*eighty* dying annually out of every thousand of the population. The streets were narrow, scarcely paved, and equaled the imperfectly constructed sewers as receptacles of all manner of abominable filth; the dwellings, principally of wood, were overcrowded, and no attention whatever was paid to their ventilation; water was scantily supplied; personal and domestic cleanliness were neither encouraged nor enforced; and the city was given up to licentiousness. Then, in 1665, London was visited by plague, and it is recorded that in one night three thousand persons perished from that terrible disease; and that up to 1679 the mortality from that source alone amounted to one hundred thousand! But now, with its improved sanitation, its stupendous sewers which have been recently completed at a cost of twenty millions of dollars, and its population increased to millions, how different the result! Instead of twenty-five years, the average duration of life is above thirty-seven years, and the rate of mortality, instead of fifty, is a fraction less than twenty-four in a thousand of the population.

Calcutta, built on a swamp on the east side of the Hoogly, and, at a few miles distance, surrounded by lakes which are supplied from overflows of the river, by a proper system of drainage of that part of the city inhabited by Europeans has become as healthy as any country of the same latitude on earth; while, on the contrary, Stockholm, built on small islands at the entrance of Lake Malar, with a mean annual temperature of 40° F., and possessing the requisite natural advantages, if properly guarded and improved, to make it one of the healthiest cities in Europe, is, because of gross disregard of sanitary laws—imperfect drainage and a bad supply of water to houses—one of the *unhealthiest* in that quarter of the globe, as shown by the death-rate.

Sanitary science, therefore, is a segment of political economy, and should receive encouragement by the State as a wealth-creating factor—riches, indeed, to the whole people far above that of any other earthly value.

It has become a classic saying that “public health is public wealth”; but who can estimate it rightly? Every case of sickness and the loss of every life from preventable disease is a tax upon the material wealth of the State and a great sorrow to the family. Count the number of deaths in a community for any given period, multiply it by *thirteen*—the estimated number of sick on hand for each death—

and you have the average total of sick persons cared for at an expense much greater than would have been necessary for their support in health. In addition to this estimate, let us remember that at least *one third* of all the cases of sickness and of the deaths that occur are preventable; that this suffering and continuing tax on health and life are in direct antagonism to industry and the general prosperity; that the visitation of diseases falls heaviest always on the poor and most helpless classes of the community; and that the pressure of bad health and poverty, with their far-reaching ill effects upon the growing and reproductive parts of the population, tends to deterioration of the race.

In times of epidemic visitation, all these ill influences culminate in general distress of the people. Let Asiatic cholera come, smiting the young and the old, withering the pride of manhood and the beauty of youth—in many sections marring, in others obliterating the festivities and gayeties of life, robbing the social circle and the family group in the garments of grief, spreading the gloom and striking the panic of sudden death—then, for the time, possibly, the value of public health, as well as legal statutes to protect it, will be justly appreciated; for, besides the general affliction from sickness and death, the direct loss in money would probably equal in amount, during the time, the whole expenditures of the national Government.

Political economists have said the cash value of the life of an able-bodied, industrious man is sixteen hundred dollars, and that the average value of men, women, and adolescents of both sexes above twelve years of age, is one thousand dollars. Now, accepting this estimate as a fair and proper basis for calculation of the wealth stored up in the United States, we may have some conception of the real value of the earnings of the *human machine*.

Besides native wealth, our country is enriched annually from immigration. Every steamer that plows its way to our shores comes freighted with human souls to swell the population of this country and enlarge the profits of labor. No migration of men has occurred in the world at all similar to that which has been pouring itself upon the shores of the United States for the past five years. In a single week we have again and again received into the bosom of society numbers as great as a Gothic army possessed in its ranks, and passed them away without hurt and without terror. Week after week, again and again they come—each vessel bringing frequently a thousand souls, a number greater than was borne by a fleet of many ships in the days when Greece invaded Ilium, or Xerxes Greece.

The question of immigration is, therefore, one of grave importance to American statesmen. It involves political, moral, and social consequences of a magnitude too vast for common apprehension. Who shall assume to tell what precise result will follow in this country from the bringing together of races of men hitherto comparatively isolated? Or who shall say whether the intellectual and physical power of the Anglo-Saxon, the cool and industrious vigor of the Teuton, or the elasticity and fire of the Celt, shall be the controlling influence in the coming time? That the inferior must recede or disappear before the superior races is an inevitable result, sanctioned alike by reason, analogy, and the

indisputable records of history. Nature's leaves, wherever civilization and science have unfolded them, bear the plain evidences that such has been the eternal course of her wise, although sometimes inscrutable, laws.

Let us hope that from the fusion of all these different families and different bloods there shall spring a composite race of men of far greater capacity than those who at present govern the nation—a race which shall have no jarring prejudices, and be animated by only the loftiest sentiments for the common welfare.

It is computed that by immigration our country is annually enriched fifty million dollars, and with net profits of labor amounting to sixty-five million dollars. The great Northwest is receiving the larger share of this wealth; but along with it there are some threatenings and dangers which well deserve wise attention. The immigrant brings with him not only his money, but also his habits of life and heredity. These may either be very good or very bad. If the former, then his citizenship is a substantial acquisition to the wealth of the State. If the latter, he is at once both a moral and physical leper, and of incalculable danger to society. Fortunately, however, thus far the assimilative and moral forces of our American institutions have been sufficiently active to absorb this immense immigrant mass and convert it into strength of the nation.

But notwithstanding the seeming capability of our institutions to swallow up, easily digest, and assimilate the stream of humanity which is constantly pouring into this country from the Old World, we must not shut our eyes against the manifest and increasing tendency of this commingling of moral and social habits to greater latitude and excesses than are to be found in either of the parent countries. In other words, the demand for labor of every character, its handsome rewards, and the plenty of money, are powerful temptations to influence a departure from simple and correct habits of life, with their almost never-failing accompaniment of good health.

The popularity of the milder alcoholic beverages—ale, beer, and wine—is directly due to the influence of our adopted fellow-citizens in all classes of society. I should be untrue to myself, to my position, to the medical profession, and to humanity, if I let this opportunity pass without sounding a note of warning against the intemperate use of alcoholic drinks, and to speak of their influence to debase the citizen and his progeny—physically, morally, and mentally—and deny him and them good health and longevity.

The connection between drunkenness and crime, and between drunkenness and poverty, is close and unvarying in its effect upon society. The remarkable increase of insanity in recent years may, in part, be traced to the prevalence of the intemperate use of intoxicating liquors. That wine, beer, and the stronger beverages, when taken in excess, all tend to derange the mental manifestations, is a fact too familiar to medical men to require of me argument to prove its truth. They act upon and disorder the brain more directly, perhaps, than any other organ; and, by habitual excess, may at last induce permanent impairment of the mental faculties.

In times of epidemic visitation—when pestilence is

sweeping the country—the intemperate and the drunkard are the first to fall by its arrows of death; and the chances of recovery from any disease or injury whatever are infinitely less for the drunkard than for the sober man. Were man to live as he should do—*enjoying* every good gift and *abusing none*—he would (saving accidents) live to extreme old age without disease. But alas! how many such careful, prudent, temperate lives could there to-day be found in this great country of ours, where a kind Providence has made it possible for us to enjoy every blessing the whole world can afford? The denunciation by the prophet Isaiah—“*Woe to the drunkards*”—“*Woe to them that are mighty to drink wine*”—is not only in course of fulfillment every day with the drunkard, but the *curse* extends to his children yet unborn, even to the third and fourth generation, by inheritance of appetites which are far more constant and certain in their descent than patrimony.

It has been asserted that at least seven tenths of all the crimes and poverty and calamity to the people of the United States spring from the abuse of personal liberty in the use of spirituous, vinous, and malt liquors; and, if the charge be true—either in whole or in part—it is a subject which should concern sanitarians. Vice needs every possible exposure and discouragement to prevent its seeds from growth, and the lesson should everywhere be taught that good health and long life can not dwell in association with a poisoned mind or an upbraiding conscience.

The public-school system of the United States is the great national laboratory for shaping, refining, and directing, on a progressively higher intellectual, moral, and social plane, the tendencies of American citizenship. In its plastic mold the children from immigrant families are freely mingled with native English-speaking youth; the lessons there taught and the manners prescribed and enforced are carried to the homes of the children in every class of society to cultivate and ennoble the aspirations of parents and guardians, and combat immoral and debasing influences which have crept into our civilization.

In the American public-school system, therefore, are centered the greatest trusts and brightest hopes for the future of the republic. It is the nursery of statesmen, philosophers, scientists, and patriots; and, being invested with such a high and mighty alliance of interests, it has become the particular care of sanitarians as the vineyard for the nurture and growth of a healthy race of men and women who shall lead the whole world in civilization. How important, then, that guardians, principals, and teachers in our common schools shall be thoroughly qualified, by special training in physiology* and hygiene, for the discharge of the high responsibilities with which they have been clothed by the community and the State!

If the opportunity of the school-room for the dissemination of the principles of sanitary science were properly appreciated and diligently improved by teachers, it would soon come to pass that all classes of the people would pay respect and render obedience to its laws. Physiology and hygiene should receive far more attention than is now usu-

* Dunglison's "School Physiology" is admirably suited for use in public schools, and is, probably, the best of its class.

ally given these studies. At present, in many schools, they are treated as if they belonged to the *ornamental branches* of education rather than the *useful*, and are taught by *title* instead of by direct practical examples gathered from the every-day life of school-children.

In country districts, school life has many more exposures to unhealthy influences than are suffered in towns and cities. For example, it is no uncommon experience for some of the children to walk two or three miles—sometimes double that distance—every day they attend school; and, when the weather is wet and the roads muddy, they are frequently compelled to enter their classes with cold feet and damp clothing, and remain in that chilly, uncomfortable condition until the period of recess arrives, or, may be, until their return home in the evening. In winter time, when the roads are icy and slippery, or when the ground is covered with snow, and travel on foot most disagreeable and fatiguing, those who have long distances to walk must hurry their footsteps to escape being tardy in their appearance at roll-call, and, when they enter their classes, are all aglow and perspiring. In that condition they take their seats, soon feel chilly, and are too sleepy and stupid to take interest in the lessons. At noon, when the hour for dinner arrives, they eat hurriedly the cold food contained in their little baskets and buckets, but not, usually, with as sharp appetite and good digestion as when they are at home. Immediately after dinner they engage too vigorously in all sorts of play—running, jumping, “chasing the fox,” base-ball, and various other fatiguing and relaxing exercises—so that by the time of the call “to books!” they are as tired and indisposed to study as when they reached school in the morning. Then, after dismissal, in the evening they are again tired out by the walk home, and thus they are more or less exposed to unhealthy influences every day during the school term.

The management of country schools should provide special accommodations for the relief and comfort of children who come with damp clothing and wet feet. This can be easily accomplished in a well-appointed reception-room for each sex, where should be kept always on hand and ready for use a sufficient number of pairs of shoes and stockings of different sizes, also several warm wraps with which to clothe and warm the tenderest of the exposed pupils until their own shoes and stockings and other garments are dry enough to put on, and they are ready to enter their classes.

Parents who are able to do so should be encouraged to supply the school store-room with an extra suit of clothing for each child they send, and, no doubt, in every community there could be gathered enough subscriptions of that kind from humane, well-to-do persons and families to meet the wants and needs of the poorer children at school whose wardrobes are already too scantily supplied to afford them comfort and proper protection in cold weather. Nowadays, however, rubber shoes, “gossamer” circulars, and gum coats have become so cheap and common it would seem that even the poorest families should be able to provide such articles of protection for their children.

To perfect the system I have indicated for guarding the health of school-children, and at the same time to cultivate a spirit of benevolence, there should be appointed by the

principal or teacher, at the beginning of each quarter, a special committee—to be known as the *Health-Saving Service*—composed of both boys and girls selected from the older and more advanced pupils, and charged with the responsible duty of looking every day after the welfare and comfort of those who need assistance, particularly the little ones. At the close of each week this committee should be required to make formal report of its labors to the teacher or principal, naming the pupils relieved and the particular service rendered in each case. Then, at the end of the school term, a handsome premium should be awarded to the pupil who has taken greatest interest in the work or performed the largest number of acts of assistance.

All examples of exposure of health during school life should be seized by teachers and made the texts of little lectures on the principles of personal, domiciliary, and public hygiene. They should point to the danger to health from wet and cold feet, too violent exercise, sitting on the ground or in draughts when the body is warm and perspiring, excessive indulgence in eating and drinking, insufficient or improper clothing, breathing a bad atmosphere in crowded rooms—all these and every other like impropriety or transgression of the laws of health should be made as plain as simple language and apt illustration can portray them.

It should be impressed upon the attention of school-children that the diseases which kill them in greatest numbers have been classed by wise men as *FILTH DISEASES*; that small-pox is easily preventable by vaccination; that scarlet fever, diphtheria, typhoid fever, yellow fever, cholera, and even pulmonary consumption, are preventable by cleanliness and correct habits of life; that there are farm-houses in all parts of the country, groups of houses in every community, whole villages, sections of towns, and districts in cities, where slovenliness and filth so much abound that sickness in some form is present at all seasons of the year; that filth does not only infect the atmosphere immediately surrounding its accumulation, but can and does transmit its germs afar; and thus it has again and again happened that whole families, with every apparent surrounding of cleanliness, comfort, and luxury, have sickened and died from infection received through the channel of some drain-inlet, or the medium of the common water-supply.

The more surely to fix the memory of these truths, the teacher should employ illustration on the blackboard to show dangerous proximity of the family residence, the stable and barn-yard, the pig-sty, the duck-pond, the privy-vault, and the kitchen sink-drain, to the water-supply in the well or cistern. He should also tell how the atmosphere in the house may become poisoned and breed disease from decaying vegetables stored in the cellar; how the milk-supply of the family may become contaminated with filth and dangerous to drink; how dwelling-houses, workshops, and factories should be constructed to be healthy to live in and occupy; and how necessary, for the maintenance of good health, that they breathe fresh air, drink pure water, and have plenty of well-cooked, wholesome food.

Besides examples drawn from village and country life, the teacher in the city school may show, by diagram on the blackboard, the system of sewerage usually adopted in towns

and cities; the importance of *traps* to prevent the inlet of deadly gases from the public sewers through the channel of the kitchen-sink waste-pipe, the soil-pipe of the water-closet, and the overflow-pipe of the bedroom stationary wash-stand; the great danger to health from imperfect ventilation of dwelling-houses, school-rooms, theatres, churches, and public halls; the manner of the water-supply; the danger from open cesspools; the necessity of guarding the public markets and green-groceries, to prevent the sale of tainted meats, stale vegetables, and decaying fruits; and not the least to be dreaded and shunned—public funerals from infectious and contagious diseases.

In the city there are also every-day opportunities to "point a moral" from drunkenness, and from police arrests for various offenses which disturb the peace and good order of society. Such examples should be used to show the penalties and hardships of vice in contrast with the honorable and lasting rewards of a temperate, virtuous life. To encourage morality and the growth of true manhood, the lives of good men in contrast with the character of bad men should be presented for study. For example, liberty-loving Lafayette should be contrasted with that "great bad man" Mirabeau, his fellow-countryman, who had a mind of the highest order, and eloquence the most commanding and impressive, but his commentary on national liberty was personal licentiousness. A look into American history and biography will find the experience of Jefferson in proof that habits of temperance win long life and good health. Then, in English history, it may be seen that Sheridan, with all his oratory and wit, became an outcast from society—a drunken, fallen man. And Savage and Burns and Byron—had they not neglected and scorned the plain precepts of temperance, morality would then have had less cause to disclaim the alliance of genius; nor would vice be so readily heard uttering the base maxim that stormy passions are the necessary accompaniments of lofty intellect.

The State has made abundant provision by statute law for the intellectual training of its youth. Why not, at least, equal concern for their physical culture and development—*mens sana in corpore sano*?

Lord Stanley declared that "sanitary studies belong to the patriot no less than to the philanthropist. Don't fancy," said he, "that the mischief done by disease spreading in the community is to be measured by the number of deaths which ensue—that is the least part of the result, as, in the battle, the killed bear but a small proportion to the wounded. It is not merely by the crowded hospitals, the frequent funerals, the destitution of families, or the increased pressure of the public burdens, that you may test the sufferings of a nation over which sickness has passed; the real and lasting injury lies in the deterioration of race, in the seeds of disease transmitted to future generations, in the degeneracy and decay which are never detected till the evil is irreparable."

Lord Beaconsfield also was an active patron of sanitary science, and uttered the sentiment that "the health of the people is the first care of statesmen." Indeed, its objects rank among the most important matters now discussed by the highest intellects and most humane hearts in every civil-

ized country. No jurist questions the right and duty of government to make and enforce laws for the protection of the public health, to secure not only as long a life as nature can give, but likewise as healthy and happy a life as possible.

The State erects imposing and costly edifices for the detention and punishment of criminals, for the education and care of the blind and deaf, and for the treatment of the insane. To support such establishments, with all their necessary appointments, hundreds of thousands of dollars are annually paid out of the public treasury, and the burden of taxation for that purpose is constantly increasing. Why not enact statutes to diminish the factors which furnish such charges to the State?

The law is singularly inconsistent in its protection and punishments. If a man commit murder, he may either be hanged or sent to the State prison for life; but preventable disease—scarlet fever, diphtheria, typhoid fever, small-pox, and other death-dealing agencies—may stealthily enter the household, kill the family, and be innocently regarded as an act of Divine Providence!

The poor pilferer in a dwelling-house at midnight may be in a state of starvation at the time he lays a trembling finger on something to eat in the larder, or on a silver waiter on the side-board, but, notwithstanding the pressure and desperation of hunger, if discovered in his trespass and theft, he is sent to prison and his family disgraced thereby; while the architect, the plumber, and, alike, the ignorant doctor, may enter in broad daylight—aye, even by *call*—and steal and destroy the life and health of the occupants.

The law makes common carriers responsible, regardless of accident, for damage done either to person or property; yet an American citizen may refuse the protection which vaccination affords against small-pox, carry that loathsome disease into a community, and start an epidemic.

If a pitfall be left in the street or public highway, and the citizen, his horse, or his ox, fall into it and is injured in any manner thereby, he may sue in a court of justice and recover from the town, city, or county, as the case may be, a sufficient sum of money to compensate for the damage sustained; but the same citizen may sicken and disable his own family, also the family of his neighbor, by accumulations of filth on his premises, and escape all legal responsibility.

Again, municipal ordinance says that, in order to avoid injury to persons and property, a locomotive engine and train of cars shall not exceed a speed of six miles an hour within the corporate limits; yet the same authority of law permits open cesspools, filthy streets and alleys, a contaminated water-supply to families, and the constant breeding of infectious and contagious diseases to kill the people.

And, again, to prevent litigation and strife among her citizens, the State has even gone so far as to prescribe the very words to be used in the purchase or transfer of property by "Richard Roe" or "John Doe." Why not the same particularity and care to prevent the rise and spread of sickness among the people?

Influenced by progressive minds in the medical profession, twenty-nine States have established State boards of health, and it is surely within the bounds of truth to affirm

that thereby thousands of valuable lives have been saved, also hundreds of thousands of dollars to the wealth of the States.

The American Public Health Association, backed as it is by the influence and support of the whole medical profession of the United States, is recognized as the great central agency for the dissemination of sanitary knowledge among the masses. Through its systematic efforts and wise administration of voluntary powers, a large public sentiment has already been secured in favor of health legislation; and, accordingly, it has been so done by legislators in many of the States.

I charge you, my brethren, to concentrate your energies and influence. Speak out as one man in the name of the dearest interest of God's children who look to you—and not unavailingly—for succor in time of their distress. If the medical profession will but remain true to itself—true alike to science and humanity—the time is not far distant when its exalted influence will compel obedience of legislators to public sentiment, and cover every State with statute law for the protection of the public health. Moral suasion may do much to encourage respect for sanitary science, but it requires the strong arm of statute law, with its severe penalties for violation, to enforce obedience to its precepts.

The West Virginia statute provides that "the State Board of Health shall take cognizance of the interests of the life and health of the inhabitants of the State, and shall make, or cause to be made, sanitary investigations and inquiries respecting the causes of diseases and the means of prevention." How broad the charge! and how humane and God-like the service which defends men, women, and children from preventable diseases! This is precisely the service which a State board of health may afford—the education of the people respecting the economic and political importance of public health; to exterminate and prevent pestilential diseases, and thus largely contribute to the general welfare.

During the last decade there has been most gratifying activity in the cultivation and diffusion of sanitary knowledge; and it is an encouraging sign of the times that so much attention is now being given by legislators to the prevention of disease as a duty of the State. The proud lead of the great Northwest States in the cultivation of sanitary science has awakened a general interest in the subject in all parts of our common country. All praise, therefore, to the industrious leaders in sanitary work in Illinois, Michigan, Wisconsin, and Minnesota. Little West Virginia, nestled in the mountains, and looking into the near future for the coming time when her inexhaustible stores of native wealth shall be unlocked to hundreds of thousands of busy laborers, has proudly acknowledged allegiance to the goddess *Hygieia*, under whose health-inspiring banner she has already won substantial victories and benefits for the saving of her citizens. But, while flushed with the stimulus of her triumphs, she turns in sadness, and with outstretched arms and pleading voice, to her elder sisters, by whom she is immediately surrounded—Ohio, Pennsylvania, Maryland, and the dear old Mother State—and says to them: "How long, oh! how long shall the land which the Lord thy God giveth thee be the *Paradise* of Quacks?"

West Virginia is very proud of that feature of her State Board of Health law regulating the practice of medicine and surgery. Nothing, I am sure, could work more smoothly and consistently with the interest of the public health than its execution as a part of the duties of the board; and I commend the example of its success to those States that have not yet taken the advanced step to secure higher medical education. This provision of the law strikes at none but those wholly incompetent to assume and discharge the sacred trust of a *physician*. Neither does it attack any so-called *school* in medicine; and the law is most reasonable and just, both to the medical profession and the general public.

From time to time laws are passed to regulate the sale of intoxicating liquors and the dispensing of poisons; to suppress lotteries and gambling-houses; to prevent the carrying of concealed weapons; to restrain the sharper, the swindler, the robber, and the assassin. Why not, with like propriety, pass laws to restrain the ignorant, and the pretender in medical practice who strikes at both life and purse, who can *kill* and then invoke the power of the courts to enforce payment for his murderous service? And is it not a ridiculous contradiction to say that a street nuisance which is prejudicial to the public health shall be abated by the power of law, and then with the next breath say that any man, without due qualification as a physician, may call himself doctor and kill his neighbor?

A lawyer, whose practice and mistakes can only affect the purse and property of his client, must undergo examination by learned judges before he can be admitted to the bar. To become a teacher in the common schools, one must pass an examination and receive a certificate of qualification before he or she can be employed. A pilot on a steamboat, before he can be admitted to the wheel, must learn every crook and bar in the channel—must know the stream so well that he can steer his craft, freighted with human life, as safely in the dark as in the light of day. But such is the inconsistency of law—such the commentary upon unlicensed personal liberty—that in many of the States any man calling himself *doctor* may swing his shingle, and, without the least restraint, prey upon the lives and property of his fellow-citizens.

The depreciated value of an American medical diploma is a reproach to the profession; and it is, therefore, high time that the conferring of degrees should be entirely divorced from the department of instruction in medical colleges. This opinion is fully warranted by my own experience as a medical examiner. Not long ago a young gentleman—a graduate of a medical college in "good standing"—came to me for registration, and, to my utter astonishment, he could not answer the question, "What is sanitary science?" Another graduate in medicine, when asked, "What is semeiology?" answered, "A description of the *spermatozoa*."

But the most shameful exhibit, involving the character of a medical college in "good standing," that has come to my knowledge is shown in the following correspondence:

MY DEAR SIR: A friend writes me that you propose attending medical lectures. I write to present the claims of ———,

the medical center of the South and West—the healthiest large city in America—beyond the reach of yellow fever, etc.

Good boarding, costing elsewhere twenty to twenty-five dollars, can be had here for twelve to fifteen dollars per month. Owing to our ———, railroad fare is only half rate. No school has better facilities for medical teaching than the ——— Medical College. As I am allowed a certain number of beneficiaries from your State (West Virginia), I will take you as one and charge you only fifty dollars instead of eighty dollars. With this reduction, cheapness of board, and reduced railroad fare, you can attend one of the best schools for less money than an inferior one. Let me hear from you. Send names of other students.

Yours truly,

* * *

This letter was a *tablet* copy—probably one of a hundred of the same kind sent out to catch the unwary. It came addressed (by mistake, of course) to a Wheeling physician who had already honorably finished his college course, and from him it came into my hands, as a medical college curiosity! It is without date, but its caption is freely illustrated with the name and picture of the college, and contains the names of the faculty, trustees, and “demonstrators.” In order to sound the depth to which “Demonstrator” — might be willing to descend in fishing for students, regardless of *quality* (?), a veritable medical student sent him the following letter of inquiry, with orthography and syntax specially set for the occasion:

WHEELING, W. VA., Aug. 18, '83.

Doct—

One of mi Friends who is trying to be a Doct has got a letter from you which says your College is one of the Best Colleges For Medical Teaching in America and that the Feas are cheaper than some other good Colleges and that sutes my eircumstance for I am a very poor young man and no matter how much I may Know of Thery of Medicin I cant practiee in W. Va. without a Deploma from a good College like the one you have in ——— you offerd to take mi friend for \$50 dollars and you will do a poor young man a favor if you will take me at the same Rate for I have that much money I can pay you in cash as soon as I get there Mi Friend will Come with me and we can stay together at the same bording house the report is here that the yeller fever is in ——— but I am not affred of any disease for I have had the Small Pox very bad. Tell me what books I will have to studdy at your College and when me and my friend must come We come by ——— I have gone through with grays anatomy and the Electric dispensary and medwifery please tell me how long I will have to stay and when I can get my Deploma and if I have to pay extra for it

In haste Yours Respectful

* * *

And here is the prompt reply that was sent to this Wheeling *student*, showing that the style of his English composition was no bar to admission at ——— Medical College:

—, August 20, 1883.

Mr. ———,

MY DEAR SIR: Your favor of the 18th to hand. I have one more speical beneficiary to allow; so I will take you on the same terms as I offered your friend. Am anxious that your State should have a better representation in ——— than it has had in the past. The other information you ask is contained in the catalogue I mail herewith. If you begin your medical course this fall, you can graduate Feb., 1885. That is as soon as any respectable school can graduate you, unless you have

already taken a course. There is no place where you can learn more medicine for the same amount of money than in ———. I came here in '77 with a very light pocketbook to study medicine, and, contrary to my expectations, I had a little left after graduating, and was given no beneficiary privilege either.

The cushioned seats for our new amphitheatre have arrived from the factory. They are all numbered, so that students on matriculation reserve their seats for the ensuing session, those matriculating first having choice. If you desire a seat near the front, you had better remit me the matriculation fee (\$5), leaving the balance of \$45, and I will matriculate you, select the best seat possible, and mail you your matriculation ticket and number of seat, so when you arrive you will not be crowded back so far that you will be unable to see well the demonstrations and experiments.

Hoping to hear from you in a few days, I am,

Yours truly,

* * *

This exhibit shows the prostitution of medical college work to base purposes at “the medical center of the South and West.” I have made the blanks to hide the identity of the actors in the comedy, because this college has accepted my friend Rauch’s “Minimum Requirements” for a medical college to be held in “good standing”; and, no doubt, its faculty are ready to swear by the West Virginia schedule of requirements also! So much for mere promises of reform and a higher standard!

Finally, in exerting my efforts in advocacy of the cause of sanitary progress, I should commit a serious blunder if I neglected to bespeak the assistance and co-operation of the ladies. Woman gave Massachusetts the first State Board of Health in the United States, and from that beginning—in 1869—twenty-eight States have followed the example. There is yet much work for her to do, and none can do it so well as she; and no cause possesses a stronger claim upon her sympathies and affections. As science advances, she gradually acquires her true position in the scale of social life. Of the world’s inhabitants, 750,000,000 universally hold woman in a state of bondage and degradation; 250,000,000 alone allow her to approach her proper sphere by acknowledging the marriage contract, paying deference to her influence, and promoting her intellectual culture. How much had the mind of man to be cultivated before it could give expression to that sweet sentiment of Campbell?

“And say, without our hopes, without our fears,
Without the home which plighted love endears,
Without the smile from partial beauty won;
Oh! what were man? a world without a sun.”

THE TREATMENT OF MIGRAINE.

By WILLIAM A. HAMMOND, M. D.,

SURGEON-GENERAL, U. S. ARMY (RETIRED LIST); PROFESSOR OF DISEASES OF THE MIND AND NERVOUS SYSTEM IN THE NEW YORK POST-GRADUATE MEDICAL SCHOOL.

UNLESS we have clear ideas relative to the morbid processes giving rise to the condition known as migraine, we can do little in the way of exact treatment. Up to within a few years past the therapeutics of the disease in question consisted of a mass of empirical formulæ, constructed upon the shot-gun principle, and directed to the stomach, the liver, the nerves, etc., according to the peculiar views held by the concocter.

But, mainly through the investigations of Eulenburg, Du Bois-Reymond, and others, we have obtained very definite views in regard to the essential nature of migraine—a hemicrania, or sick headache—and the methods of treatment deduced therefrom are probably as exact as they are in any other disease, and likely to be followed by as beneficial results. Occasionally a case resists all treatment, but, as a rule, as soon as we have ascertained the kind of migraine we have to deal with, and have put into operation the proper remedial measures, success ensues.

Two distinct types of the disease have been differentiated: the angio-spastic and the angio-paralytic.

1. The angio-spastic—spasmodic or sympathico-tonic form of hemicrania—is the result of a spasm of the blood-vessels by which their caliber is diminished, and from which a state of anæmia of the parts of the encephalon to which these vessels are distributed is produced. It is characterized, in addition to the pain, nausea and vomiting, noises in the ear, circles or flashes of light in the eyes, and mental and physical prostration, by certain oculo-pupillary and vaso-motor disturbances, which are generally easy of recognition. These are as follows:

During the paroxysm it is sometimes observed that the pupil on the affected side is dilated, while the eyeball is apparently sunk deeper in its socket than in the normal condition. The face and ear of the side on which the pain exists are pale and cold to the touch, and the temporal artery is contracted, so as to give, when compressed, the sensation of a tight cord. If the bulb of a thermometer be placed in the external auditory canal, it will be found that the temperature is about 0.5° F. below that of the unaffected side. Whatever tends to diminish the flow of blood to the painful region increases the intensity of the symptoms, while, on the other hand, whatever increases the quantity of intracranial blood lessens the pain and the severity of the other phenomena. Thus, if pressure be made on the common carotid of the side corresponding to that of the disease, the symptoms are increased in violence, while pressure on the opposite carotid, by causing a diversion of blood through the other artery, diminishes the suffering.

As the paroxysm passes off, and the pain becomes less, the pupil contracts, the vessels of the face become distended, the temperature rises a little above the normal standard, the conjunctiva is injected, the secretion of tears is augmented, and the pulse is accelerated. At the same time there are generally profuse perspiration and an increase in the amount of urine excreted. Ophthalmoscopic examination of the fundus of the eye shows that the choroid is paler than it is in the natural condition, and that the retinal vessels are smaller than they are in health.

2. The other form, which is called paralytic from the fact that the coats of the arteries are relaxed, and hence the caliber of the vessels increased, presents phenomena in many respects the very opposite of those which are characteristic of the first-named variety. During the existence of the paroxysm the pupil is contracted, as is also the opening of the eyelids. The face and ear of the affected side are red, and feel hot, and there is an absolute increase of temperature. The thermometer, the bulb of which is inserted into the

external meatus, shows an increase of from 0.2° to 0.5° F. over that of the sound side. The temporal artery is enlarged and tortuous, and beats with increased force; compression of the carotid on the side corresponding to that of the disease lessens the pain, and whatever tends to increase the amount of intra-cranial blood intensifies all the symptoms. The fundus of the eye is, as Möllendorf observed, of a bright scarlet color.

Sometimes these conditions alternate, one paroxysm being of the spasmodic variety, and another presenting all the phenomena of the paralytic type. Occasionally both may exist at the same time on the opposite sides. At other times the oculo-pupillary and vaso-motor symptoms are absent, the pain alone being present. In such cases experiment only can determine the nature of the existing seizure.

Such being the pathology of migraine, the principles of treatment are clear and specific. In general terms, the indications are, in the spasmodic form, to relax the spasm of the vessels and to augment the quantity of intra-cranial blood; in the paralytic form, the treatment should be directed to increasing the tone of the arterial coats, thus lessening the flow of blood to the brain.

In the angio-spastic type, galvanism is of great service in the treatment of the paroxysm. One pole should be applied over the sympathetic nerve in the neck and the other over the solar plexus, and the current from about fifteen cells allowed to pass for two or three minutes. Often a single *séance* will break up the seizure. There are, however, other means of still greater efficacy and availability.

I usually administer at first a hypodermic injection of about a quarter of a grain of morphine. Then I give, every fifteen minutes, a pill containing a drop of a one-per-cent. solution of nitro-glycerin, or a drop of the one-per-cent. solution on a lump of sugar. If the differential diagnosis has been correctly made, this plan will cut short nearly every paroxysm in which it is used, and in which there are no specific ætiological complications. If, for instance, the cause is malaria, a large dose of the sulphate of quinine should be given instead of the morphine. Half a drachm will not be too much in ordinary cases.

In the intervals between the paroxysms, nitro-glycerin, or glonoin, as it is often called, should be given steadily for several months, a drop of the one-per-cent. solution being taken three times a day. In addition, the bromide of sodium, or some other of the bromides, should be persistently administered during the same period. Their influence is antagonistic to all kinds of spasm, and hence they tend to prevent that condition in the vascular coats.

In the angio-paralytic form of migraine, galvanism, applied as in the form just considered, is often equally efficacious in cutting short a paroxysm. Cold to the nape of the neck is also useful, and compression of the carotid artery of the affected side with Dr. Corning's instrument sometimes acts like a charm. Internally, thirty or forty grains of guaiacum will often cut short a seizure, as will also ten grains of caffeine, or even strong coffee or tea.

Better still is a large dose—a hundred grains—of the bromide of sodium. This rarely fails to abort a paroxysm.

The bromides not only relax vaso-motor spasms, but they give tone to vessels the coats of which are relaxed.

In the intervals between the paroxysms the treatment should consist of the bromides, ergot, and strychnine. In those cases in which the symptoms other than the pain are not so decided as to admit of an exact diagnosis being made—and they are not uncommon—the treatment must be experimental. Often, however, indications for the therapeutics can be obtained by pressure being made on the carotid artery of the affected side. If the case be one of the spasmodic type, the pain will be increased by this procedure; if it is of the paralytic form, the pain will be diminished.

In both forms the stomach and bowels must be kept in good condition. Sometimes attacks of either kind are caused by undigested food in the stomach or intestines, and an emetic or a purgative aborts it at once.

NOTE UPON THE TREATMENT OF MIGRAINE.

By ALLAN McLANE HAMILTON, M.D.

MIGRAINE must be considered as much of a vascular as a nervous disease. It often, I may say generally, is found among those persons who have a predisposition to nervous and mental diseases, and whose strain springs from a phthisical or insane source. It exists as a dyscrasia, which may be called epileptic, and the attacks of headache, when repeated, are often the forerunners of convulsion and insanity—which develop in later years. I have deemed this relation of so much importance that I have for some time past questioned all epileptics in regard to the possibility of a history of early headaches.

In the treatment of migraine the following indications are presented: 1. The improvement of the general health and the removal of the cause. 2. The maintenance of a constant vascular balance. 3. The relief of the paroxysm. A consideration of the first division needs scarcely any special mention. The hypophosphites, the cod-liver oil and egg emulsion, and citrate of iron and ammonium, are indicated in various cases. For the maintenance of an even state of vascular tonus, I use digitalis or digitalin, and have known many discouraging cases to be freed from their headaches for some time, even for years. Of course, some care must be exercised in regulating the dose of this powerful drug, for a vascular hyperæmia is to be avoided. Nitroglycerin, which I originally recommended for the anæmic form of migraine several years ago, may be substituted for the digitalis, in half-minim doses of the ten-per-cent. solution, or the *Tr. convallariæ matialis* may be given.

For the relief of the paroxysm itself, I find the administration of large repeated doses of ammonia, in the form of the carbonate, muriate, or aromatic spirits, to do most good. Twenty grains of the muriate of ammonia, well diluted, and given in Vichy water every hour until three or four doses are taken, will usually break up an attack. When we have reason to believe that the congestive stage of the attack is that needing our attention, we may give large doses of the bromide of ammonium in combination with the tincture of

cannabis indica. If the attacks of migraine appear during or just after the menstrual period, the use of the bromide and cannabis mixture will be found to be attended with great benefit. When there is any periodicity in the occurrence of the headaches, and they have a certain regularity in expression, we are warranted in using the bromides as we would in epilepsy.

NOTE ON THE TREATMENT OF MIGRAINE.

By ALFRED L. CARROLL, M.D.,

NEW BRIGHTON, N. Y.

LIKE other neuralgias, migraine may be induced by various causes, and its successful treatment depends upon the recognition and removal, if possible, of its source. No fixed therapeutic rules, therefore, can be laid down for its management, nor will any "favorite prescription" of a never-so-eminent physician prove uniformly efficacious. Some cases, for example, may be speedily and permanently relieved by properly selected eye-glasses after the signal failure of galvanism and caffeine, while others will yield to gynecological agencies alone. I remember an instance in which migraine manifestly had its origin in the irritation induced by a dead tooth, setting up first a facial neuralgia, which subsequently gave place to periodical hemierania with its attendant gastric disturbance. Again, we sometimes meet with cases which are seemingly due to chronic malarial toxæmia, and which yield to arsenic, iron, and quinine. Anæmia, hyperæmia, vaso-motor spasm, and angio-paralysis have been adduced as causes of migraine, and obviously, under such differing circumstances, a corresponding discrimination would have to be exercised between chalybeates, bromides, amyl nitrite, glonoin, and strychnine. As regards the large class of cases which, in the absence of any knowledge about them, we conveniently call idiopathic, our treatment must for the present consist of tentative empiricism, and from this point of view I have found more good results from the long-continued use of cannabis indica in small doses (one third to one half a grain of the extract) than from any other single remedy. Guarana, if taken early enough, will often palliate, or even cut short, an attack, but I have never seen permanent benefit from its employment; nor has my experience with any of the many vaunted cures encouraged me to believe that we are near the discovery of an unfailing specific.

Correspondence.

LETTER FROM ST. LOUIS.

The Missouri State Board of Health.—The St. Louis Gymnasium.—Discipline in the St. Louis Medical Society.—Medical and Sanitary Officers of the City.

St. Louis, November 7, 1883.

HIGH hopes have been had that our Missouri Board of Health would be a credit to the profession here, as that of our neigh-

boring State has been; but, if a rumor which I heard the other day be true, there is ground for fear that we are doomed to disappointment. It was stated to me that a country physician applied to the Board of Health, at its recent session in this city, for registration. His diploma was issued by a medical school which the Board of Health has declined to recognize. He then presented a certificate of attendance at the College of Practitioners in this city, and was admitted to registration. The College of Practitioners does not grant diplomas, and the courses of lectures are only five weeks long. Now, on what ground the Board of Health could accept the certificate of attendance at a course of lectures of five weeks' duration in an institution which only proposes to give special demonstrative instruction to medical graduates and grants no diplomas at all, I can not see.

I once heard the late Dr. Hodgen say that the St. Louis gymnasium had supplied him with a number of very interesting surgical cases. The case we were then discussing was one in which a robust, athletic young man had fallen while exercising on the horizontal bar and fractured one or two of the cervical vertebrae. I am reminded of this by seeing an account of the reopening of the gymnasium, which is said to be now one of the finest and most completely fitted establishments in the country. The organization was effected some twenty-six years ago. It has had its seasons of prosperity and of comparative failure, but now seems to be in a more prosperous condition than ever before. It has nearly seven hundred members enrolled, and owns the handsome property at present occupied. The main hall measures 102 by 60 feet. They have all the various forms of apparatus which have been found serviceable in developing and cultivating the physical powers. No doubt many of our young men will make good use of the opportunity afforded, by membership in the gymnasium association, to develop their muscles and secure more robust health, while it is probable that some, by immoderate exertion, or carelessness, or lack of skill in executing some difficult feat, will receive serious, perhaps fatal, injury.

There has been music in the air in the hall of the St. Louis Medical Society. Some of its members seem to have been impressed with the idea that a society which had so generally advertised its adherence to the Code of Ethics of the American Medical Association, as this society did last summer, ought to see to it that its own skirts were clear. Accordingly, a special committee of three members was appointed to take into consideration the ground for certain rumors with reference to the professional conduct and character of one or more members of the society, "with instructions that, if these rumors proved to be well founded, they should formulate charges and prefer them before the Standing Committee on Ethics. As the result of these investigations, the committee were convinced that the rumors referred to were well founded. They formulated charges, cited the physician to appear before the Committee on Ethics, and presented before the committee evidence that they regarded the charges and specifications proved, with one exception, viz.: the charge of being guilty of criminal abortion. With regard to this charge the Committee on Ethics reported that while they were convinced of its truth they did not feel that the evidence was such as to constitute legal proof. As a result of the report of the Committee on Ethics, a motion was made and carried by which the physician referred to was expelled from the society. Early in the following week the person expelled brought suit against the three gentlemen who constituted the Investigating and Prosecuting Committee, for damages to the amount of \$50,000, for malicious libel, inasmuch as they had procured his expulsion from the Medical Society and allowed the same to be published in the public prints. The original petition charged them with malicious libel on five counts, being the five charges

preferred before the society. 1. Charging him with practicing criminal abortion. 2. With unprofessionally soliciting the patronage of another physician's patient, the other three charges being for unprofessional conduct and general bad reputation. He considered that his fair reputation and business prospects had been damaged to the amount of \$10,000 on each one of these counts. When notice was served by the defendants to take depositions, the plaintiff withdrew all the counts but the first, thus reducing the amount of damages claimed from \$50,000 to \$10,000. It will be noticed that the count on which the claim is now made refers to the charge which the Committee on Ethics decided was not proved by the evidence adduced. It is by no means an easy matter to prove a man guilty of practicing abortion, as those who are aware of the crime are almost always *participes criminis*. It is to be hoped, however, that in this case the truth will be demonstrated, and that, if this man be of such evil character as has been charged, he may receive the righteous retribution which his crime merits, in addition to the expulsion from the society. The Circuit Attorney testified yesterday before a notary that the plaintiff was indicted on the charge of having procured an abortion in the month of May, 1882, but that the indictment was not prosecuted because several important witnesses had been spirited away, secreted or in some manner prevented from appearing at court on the day of trial. The attorney expressed the belief that the plaintiff had directly and indirectly furnished money to important witnesses living elsewhere, to keep away from the city.

At the next meeting following that at which the vote of expulsion above referred to was passed, the same committee preferred charges against three other members of the medical society for unprofessional advertising and issuing of circulars. No final action has been taken in this case. In fact, the Committee on Ethics is put in rather a peculiar position with regard to this, inasmuch as an advertisement of "radical treatment of consumption" has been kept standing in the advertising columns of the daily papers by a physician who is himself one of the Committee on Ethics.

For the last six months the Mayor and the Council have been at loggerheads, and the municipal appointments which should have been made in April have just now been made and confirmed. In the reorganization of the Health Department some changes have been made. The new Health Commissioner is a man who has performed creditably to himself and satisfactorily to all concerned the duties that devolved upon him as assessor and collector of water-rates, and will undoubtedly be an efficient executive, though it does seem rather unsatisfactory that the head of the Health Department should be a non-medical man. The medical members of the Board of Health are Dr. Joseph Spiegelhalter, who has filled that position for a number of years, and Dr. E. M. Nelson, the editor of the "St. Louis Courier of Medicine," and a new man in political matters. The superintendent of the City Hospital is Dr. D. V. Dean, who has occupied that position for eight or nine years. The superintendent of the Female Hospital is Dr. G. F. Hulbert, a young man who has been there for a few months only, having been appointed to the position on the resignation of Dr. P. V. Schenck, who left it a year ago.

Dr. C. W. Stevens, who has just been appointed to take charge of the Insane Asylum, is a man of many years' practice, having had much previous experience in the charge of the State and county insane asylums.

THE SPREAD OF DISEASE BY SOILED LINEN carried in the street cars is one of the dangers to public health against which our sanitary officials have to proceed vigorously at times. The practice is prohibited by the sanitary code, and the Health Department is about to enforce the ordinance strictly, it is stated, punishing conductors if necessary.

THE
NEW YORK MEDICAL JOURNAL,
A Weekly Review of Medicine.

Published by
D. APPLETON & Co.

Edited by
FRANK P. FOSTER, M. D.

NEW YORK, SATURDAY, NOV. 17, 1883.

PHYSICIANS AND SANITATION.

IN an article with this title, the "Sanitary News," of Chicago, a publication which we hold in high esteem, seems to show itself somewhat nettled by the intimate connection that the medical profession conceive should exist between sanitary regulations proper and enactments for regulating the practice of medicine. "To the physician," says our contemporary, "no progress has been made in public health unless a law is secured which will regulate the practice of medicine, and prevent quacks from practicing upon the credulity of people."

The adoption of any great measure to promote the public welfare is commonly secured by the united efforts of men whose individual sentiments as to matters of detail are somewhat diverse. When these measures are complex in their nature, it almost always happens that one of their features seems of supreme importance to one set of their supporters, and another to another. A great number of people may agree that a certain course of action is desirable, while scarcely any two of them may be moved by precisely the same reasons. Short of the millennium, human nature will no doubt continue so constituted as to keep up this state of things. We may allow, then, that physicians are apt to look upon the legal regulation of medical practice as high in the scale of means to be taken for protecting the public health. It is doubtless quite as true that sanitary engineers regard material sanitary appliances as by all odds the leading factor in sanitation. The hygienist who takes a broad survey of the whole field would perhaps consider the one class of men equally narrow-minded with the other; but, if he were a man acquainted with human nature, he would not stop to find fault with the fact, but would accept it as a necessary evil.

It may be that there is a tendency on the part of some physicians to view the suppression of quackery as the prime object to be accomplished by boards of health, but we know of none who would go so far as to assert that no progress had been made in public health legislation until a law for the purpose had been secured. That the matter is really one of very great importance, probably the engineers themselves would not deny, although the "Sanitary News" rates it as less important than either correct plumbing, ventilation, water-supply, or sewerage. How much warrant there is for considering the proper regulation of medical practice as at least of equal consequence with the several elements thus set ahead of it by our contemporary, may be gathered from Dr. Reeves's fervid words, in the paper read by him before the American Public Health Association this week, and published elsewhere in this issue of the journal. At all events, whatever may be the relative urgency of the meas-

ures held dearest by different sets of men, the end for which they all profess to be working is scarcely to be furthered by their falling foul of each other. An ill-natured taunt may easily give rise to an amount of dissension capable of neutralizing the product of years of concerted effort.

In further depreciation of the purely medical element in public sanitation, the "Sanitary News" goes on to say: "The aim of sanitary science is to place all people beyond the necessity of calling on a physician, be he good or bad. Sanitary science, if it is allowed perfection, will deprive medicinal administrators of their calling." The tribute conveyed in these self-evident propositions is so substantial that we can well afford to smile at any slur that may have been intended in the use of the epithet "medicinal administrators"—unless, indeed, those to whom it is applied are considered too stupid even to see that their efforts to promote sanitary legislation must, to some degree at least, ultimately prove subversive of their own material interests.

THE NEW YORK INFANT ASYLUM.

THE management of the country branch of the asylum, we regret to say, still remains a matter of controversy, and it is difficult to form a satisfactory estimate of the merits of the case. A coroner's jury has found the resident physician incompetent and criminally negligent, besides which, it charges her with having returned a false certificate of death in the case of the child alleged to have been poisoned with ammonia. The newspapers have spoken of the probability of a warrant being issued by the coroner for her arrest on the charge of manslaughter. Under this stress of troubles, she has asked to be relieved from duty for the time being. A coroner's jury is not the loftiest sort of tribunal, and we fancy the public will attach no great weight to the finding in this instance, especially when it is borne in mind how easy it is in general to make a show of evidence against the administration of a hospital. We heartily trust that the lady will be able to make good her promise to clear herself of the charges pressed against her.

In another particular, matters seem more favorable for the managers than at the time of our last issue. It looked then as if a number of the medical officers were disposed to throw up their connection with the institution in disgust. We are now authorized by one of them, Dr. Paul F. Mundé, to state that his resignation, which, at his request, we announced last week, had nothing to do with the institution's present troubles. On the contrary, he assures us that it was handed in last spring, and kept in abeyance by request. He adds that his sympathy has been most heartily with the present medical board.

We have received from the secretary of the board of managers, Mr. Richard B. Kimball, a communication embodying extracts from the minutes of the Executive Committee which, he states, will correct errors in the statement published by Dr. Joel Foster and others. The pressure on our columns will not allow us to publish the secretary's communication in this issue, but we shall present it to our readers next week. In the mean time we can only repeat our hope that the differences between the officials of the asylum may soon be healed.

MINOR PARAGRAPHS.

HOSPITAL SATURDAY AND SUNDAY.

MEASURES have lately been taken to extend the machinery for collecting contributions to the fund in such manner as to admit of the matter being brought to the attention of individual artisans in the various trades through trade channels. At a meeting of representatives of the trades, held in the chapel of St. Luke's Hospital last week, arrangements were made by which workmen may subscribe small sums to a permanent fund for their own benefit, and a plan was adopted for a coupon system whereby auxiliary societies may draw on the general fund.

OPIUM SMOKING.

AN iconoclast has arisen in Hong Kong, in the person of an English colonial surgeon, who maintains that the practice of smoking opium exerts no deleterious effect upon the system, or, indeed, any effect whatever, the injury done by it being of a moral kind only, leading to habits of dissipation and laziness. Dr. Ayers, the promulgator of this doctrine, founds his statements on a wide observation and some personal experience. He argues that the active constituents of the drug are destroyed in the process of combustion.

THE TEXAS "COURIER-RECORD" OF MEDICINE.

THE second number of this new monthly journal, dated October, 1883, has reached us. It contains fifty-nine pages of reading-matter, made up of five original communications, a number of selected articles and abstracts, no fewer than fifteen editorials, and a varied assortment of miscellaneous paragraphs. The "Courier-Record" presents a creditable appearance. It is edited and published by Dr. F. E. Daniel and Dr. E. L. Stroud, of Fort Worth.

NEWS ITEMS.

INFECTIOUS DISEASES IN NEW YORK.—We are indebted to the Sanitary Bureau of the Health Department for the following statement of cases and deaths reported during the two weeks ending November 13, 1883:

DISEASES.	Week ending Nov. 6.		Week ending Nov. 13.	
	Cases.	Deaths.	Cases.	Deaths.
Typhus.....	1	0	1	1
Typhoid Fever.....	36	16	50	21
Scarlet Fever.....	38	6	67	8
Cerebro-spinal meningitis....	4	4	3	1
Measles.....	19	3	22	1
Diphtheria.....	31	19	43	23

TYPHOID FEVER CONVEYED BY MILK.—Another instance of this wholly avoidable way of spreading typhoid fever has lately been reported from Port Jervis, N. Y. An investigation is to be made under the direction of the State Board of Health.

AN OUTBREAK OF TRICHINIASIS was lately reported from Akron, O., due, it was supposed, to eating headcheese. Subsequent advices state, however, that microscopical examination has failed to reveal the parasite, and the inference is therefore drawn that the symptoms were due to a partially decomposed state of the meat.

THE CHOLERA IN THE EAST.—Two deaths from cholera took place in Alexandria on the 7th inst. On the 10th the disease was said to be subsiding in Mecca.

THE HEALTH OF BOSTON.—According to a recent statement by the Board of Health, there was a striking increase in the prevalence of infectious diseases during the month of October

as compared with the same month last year, especially noticeable with regard to scarlet fever, of which there were 218 cases reported, against 48 last year.

MEDICAL MATTERS IN CANADA.—We learn from the "Union médicale du Canada" that the Montreal General Hospital has lately received a gift of \$50,000 from Mr. George Stephen, the president of the Canadian Pacific Railway, to cover the cost of contemplated additions to the building; also that the Hon. Donald A. Smith has endowed one of the chairs in the Medical Faculty of McGill University in a like sum. The same journal states that the Laval University course in medicine was opened October 17th, and that the dormitory system is obligatory with all the students not residing in Quebec.

A CONVICTION UNDER THE MEDICAL PRACTICE ACT.—On complaint of the Medical Society of the County of New York, one "Dr." Protin has been convicted of illegally practicing medicine, and fined \$100. His diploma is said to have been issued by "Paine's University of Medicine and Surgery," of Philadelphia, and it lacked the indorsement required by law.

THE NEW YORK POLYCLINIC.—Dr. Allan McLane Hamilton has been appointed professor of diseases of the mind and nervous system.

DARTMOUTH MEDICAL COLLEGE.—The annual commencement took place on Tuesday, the 13th inst. The number of the graduating class was forty, being the largest for many years past.

A STATUE OF PINEL is soon to be set up in Paris by the *Société médico-psychologique*, pecuniary aid having been given by the Minister of Fine Arts and the Municipal Council. The sculpture, by Ludovic Durand, represents Pinel in his official robes, holding some broken iron in his hand, at his feet crouches an insane girl, with her eyes fixed upon her liberator. The head of Pinel is said to be strikingly expressive of the great alienist's lofty character.

THE NEW YORK SKIN AND CANCER HOSPITAL.—An examination of candidates for the position of House Physician will be held at the hospital, on Friday, the 23d inst., at 3 P. M. For information, application may be made, before the 20th, to the secretary of the medical board, Dr. G. H. Fox, 18 East Thirty-first Street.

THE INTERNATIONAL MEDICAL CONGRESS OF 1884.—The following provisional programme of the section in psychiatry and neurology has been announced: *Psychiatry*: 1. A Statistical View of Mental Diseases and Psychiatric Institutions in the Northern Countries of Europe. 2. A Plan for a Uniform System of Annual Reports of the Lunatic Asylums of Different Countries. 3. The Colony Treatment of the Insane. 4. The Value of Exercise in the Treatment of Mental Diseases. 5. The Effect of Schools in the Production of Insanity. 6. The Body Temperature in the Primary Stages of Insanity. 7. Insanity in Childhood. 8. Perversion of the Sexual Instinct. 9. The Psychical Troubles which may take the Place of an Attack of Epilepsy. 10. The Influence of Syphilis in producing General Paralysis. 11. The Anatomical Characteristics of the Brain in Idiots. 12. The Best Means of breaking up the Opium Habit. *Neurology*: 1. The Effect of Lesions of the Peripheral Nerves in producing Structural Changes in the Nervous Centers. 2. Secondary Degenerations in the Brain and Spinal Marrow. 3. Disturbances of Speech of Cortical Origin. 4. Visual Disturbances of Cortical Origin. 5. Cortical Epilepsy. 6. Vaso-motor and Trophic Neuroses. 7. The Influence of Affections of Peripheral Organs (particularly the Sexual Organs) in the Production of Functional Disturbances of the Nervous System, and especially Hysteria. 8. Amyotrophic Lateral Sclerosis, or Amyotrophic Progressive

Bulbar Paralysis, especially with regard to the Constancy of its Lesions and its Difference from or Identity with Progressive Muscular Atrophy. 9. The Curability of Tabes Dorsalis. 10. The Influence of Syphilis in the Production of Tabes Dorsalis. 11. Is Landry's Paralysis an Essential Disease, or simply a Symptom which may be produced by Different Pathological Processes? 12. The Value of Nerve-Stretching as a Method of Treatment.

THE LATE DR. THUILLIER.—We lately recorded Dr. Thuillier's death from cholera in Egypt, whither he had gone as a member of a French commission appointed to investigate the outbreak. A fund is now being raised for a testimonial in his honor, and a tablet has been placed in the vestibule of the *École normale* in Paris, bearing this inscription: *Louis Thuillier, mort pour la science, Alexandrie, 1883.*

THE DE CANDOLLE BOTANICAL PRIZE.—Professor A. de Candolle, of Geneva, Switzerland, offers a prize of 500f. for the best essay on any genus or family of plants. Manuscripts, in Latin, French, German, or Italian, should be sent to Professor de Candolle before the 1st of October, 1884.

OBITUARY NOTES.

J. MARION SIMS, M. D.—Dr. Sims died, quite suddenly, on Tuesday, the 13th inst., at his house in Madison Avenue. For two years or more he had been out of health much of the time, as the result of a severe attack of pneumonia, and on several occasions his condition was considered precarious. During the past summer, however, and since his return from Europe, but a few weeks ago, it seemed that he had regained his accustomed vigor. He was able to attend to his practice, and it is even said that he visited a patient on Monday evening. Tuesday morning he rose as usual, and made no complaint of illness, but in the course of a short time Mrs. Sims noticed that he looked ill, and at once summoned her son, Dr. Harry Marion-Sims, to his father's assistance. The son, who was in the house at the time, reached the room only to find his father dead. It is supposed that disease of the heart gave rise to the fatal attack.

James Marion Sims was born in Lancaster District, S. C. January 25, 1813; consequently he was in his seventy-first year at the time of his death. He received the degree of bachelor of arts from the South Carolina College in 1832, and began the study of medicine in Charleston. He was graduated from the Jefferson Medical College, of Philadelphia, in 1835, and entered into practice a year later in Montgomery, Ala. While in Montgomery he devoted a great deal of ingenuity and perseverance to improving the operation for genito-urinary fistulæ. Although he originated nothing with regard to the operation that had not been known and practiced before, it is certain not only that the procedures he brought into vogue were really the fruit of his own ingenuity, but that his genius systematized them and demonstrated their importance. Practically, then, we owe the modern operation for the repair of these injuries to him. In those days such fistulæ were quite common, from lack of preventive measures that we now see the necessity of adopting in midwifery practice. Whoever showed that they could be repaired, and how it could be done, was, therefore, a benefactor of his race to an extent that it is not easy for the rising generation to conceive of, for vesico-vaginal fistula is now an uncommon ailment.

It was during Dr. Sims's residence in Montgomery, also, that he discovered the great utility of the perineal retractor as a vaginal speculum. The immediate occasion of the discovery was accidental, but the incident that led to it would, it is safe to say, have been followed by no such result had it happened to a man destitute of Dr. Sims's remarkable and almost feminine keenness

of perception. It is true that in this matter, too, he had been in a certain sense anticipated, but it was he, and he alone, who first perceived the immense advantages that gynecology would derive from the general use of an instrument acting on the principle of perineal retraction. Sims's speculum has worked a revolution in gynecology.

Montgomery was now too small a field for a man enthusiastic over his achievements and over what they seemed destined to lead to. A continent soon proved too narrow, and it was not long before he was teaching gynecological surgery in one after another of the great capitals of Europe. The speculum was invented in 1845; in 1853 Dr. Sims took up his residence in New York, and here, except for the years that he was abroad during the late civil war, and his frequent shorter visits to Europe, he has since worked and taught. It is here that he may truly be said to have founded the American practice of gynecology; literally, he founded the Woman's Hospital, the nursery of gynecology in America.

It is unnecessary to trace Dr. Sims's further career—his triumphs and the honors that have fallen upon him—for it forms an integral part of the history of American medicine, and is written in the memories of all who know that history. Although never a professor, he was in the highest degree a teacher. He was phenomenally fertile in suggestions, many of which have been followed out by others with such advantage that not a few features in the gynecological practice of the present day are really attributable to him with which perhaps he himself had forgotten his connection; had he personally explored a tithe of the channels into which his ingenuity forced him to cast a glance, ten lifetimes would not have sufficed for the task. He was not a voluminous writer; nevertheless, in the course of his life he contributed many important papers to the medical journals. His book, "Clinical Notes on Uterine Surgery," was published in London in 1866, and in New York the following year. Fragmentary as it was, it was so palpably original from cover to cover that it made a profound impression. It was translated into several European languages, and has been referred to with the greatest deference by all subsequent writers in gynecology. Dr. Sims occupied many positions of honor in the profession, and his addresses, chiefly as the president of various learned bodies at different times, including the American Medical Association and the American Gynecological Society, of which latter he was one of the founders, were all remarkable for grace of language and weightiness of matter. There was never anything commonplace in what Sims said; it always made an impression.

As a surgeon, Dr. Sims's most noticeable characteristics were ingenuity and boldness. He was such a master of his art that he was a library unto himself. It is too soon yet to say what is to be the final result of his influence on surgery; but this much at least may be said, that he urged gynecology ahead much more than a generation—he drove it through an experience that it might otherwise have had to crawl through. It is quite reasonable to suppose that many of his teachings will be reversed, but in their fundamental features the doctrines and the procedures he taught will not soon lose their prominence.

As a man, Dr. Sims's virtues were such as gained him the respect and admiration of two hemispheres. He stood aloof from the terrible struggle through which the nation passed during the War of Secession, and without forfeiting the esteem of that section of the country against which his sympathies were enlisted. At a subsequent period, in aid of a foreign community, he earned laurels of which we are all proud. He had antagonists, and sometimes found himself in a storm of controversy, as was exemplified not long ago in the war of pamphlets that accompanied his withdrawal from the Woman's Hospital.

Bitter as portions of these documents were, it is to be doubted if any of his opponents ever quite lost their fondness for him.

In debate, he was sometimes heated to a degree that threatened rancor, but he was also chivalrous. Those who witnessed what took place when, at a meeting of the Medical Society of the County of New York, held not long before the death of the lamented Peaslee, he pushed his invective to the verge of the unbearable in denunciation of Peaslee's teachings in regard to incision and dissection of the cervix uteri—those who were present at that memorable scene need no reminder either of his biting sarcasm or of his generous apology. As period after period of Sims's eloquence rolled out, Peaslee's pale, thin form, motionless and impassive as an icicle, drew every eye to itself. Men held their breath, dreading lest these two great men should come to unseemly behavior; but it was Southern ardor against Yankee repose. A voice called Sims to order, but Peaslee rose slowly and majestically from his seat, and, in measured words that betrayed not a trace of emotion, quietly said: "Mr. President, I beg that Dr. Sims be not interrupted. When he has finished, I shall have something to say." When the time came, he did have something to say; he said it with the extreme of precision and propriety, but every sentence told. Sims soon saw that he had misinterpreted his antagonist, and now it was Southern chivalry against Yankee logic. With every mark of nobility in his mien, Sims jumped to his feet, and, offering his hand to Peaslee, said, in substance: "I see that I have been unjust, but Dr. Peaslee will take my word when I declare that it was not intentionally that I wronged him. The paper I have read to-night is already in type, but it shall never be published." The two men shook hands, and the paper never saw the light. The logical victory was with Peaslee, but Sims carried home with him the winnings of heroism.

In Dr. Sims's death the American profession has lost a giant, and the world at large a noble man. It needed not a legal enactment to perpetuate the name of Marion Sims; it will be handed down through all time to come.

MARSHALL S. MEADE, M. D., OF NORTHFIELD, MASS., died on Tuesday, the 12th inst., at the age of eighty-one. He was born in Chesterfield, N. H., June 4, 1802, and for the last half century had practiced medicine in Northfield. He was a member of the Massachusetts Medical Society, and one of the most prominent and popular practitioners in Franklin County. In 1853 he was a member of the State Legislature.

Letters to the Editor.

MEDICAL LEGISLATION IN OHIO.

CINCINNATI, October 29, 1888.

To the Editor of the New York Medical Journal:

SIR: Your Cincinnati correspondent, in your issue of the 27th, speaking of the medical bill that was defeated in the Ohio Legislature last winter, thinks that the "irregulars" followed Dennis Kearney's advice and "pooled their issues" against it, because the bill did not specify the different schools in medicine that were to be recognized in the proposed Board of Health. He includes "physio-medicals" among these opponents. In this he is mistaken. I believe myself entitled to speak for the physio-medicalists of Ohio, and ask space to correct the error of your correspondent. We were urged to oppose the bill, but positively refused. The wording of the bill left it open to suspicion, and the bill might possibly have passed had its friends consented to

change its phraseology so as to remove that suspicion. Nevertheless, it was favored by physio-medicalists, who preferred to believe it was intended honestly and would be executed fairly.

The present Ohio medical law is worse than your correspondent states. It allows every county society to license its members without check; the licenses may be perpetual, and there is nothing to encourage or compel medical education. Any band of ignoramuses may incorporate a society, and proceed to issue licenses as if it were a college. And, through our general law on education, a college charter can be obtained very easily; there is no supervision of such charters, and they may be used *ad libitum* to cover and make legal the sale of diplomas. The profitable business of diploma huckstering is thus sanctioned, and protected by the laws of Ohio.

Physio-medicalists are not responsible for this status of our laws. We opposed the present law, because we saw that it would make Ohio the asylum of medical charlatans, as it has done. We worked against it, because it is calculated to encourage ignorance and cast a stigma on medical science in Ohio. Since that law was passed I have repeatedly, through the public press, shown its fallacy and urged a radical change in our medical statutes. The character of the law that I have advocated for many years is as follows:

Create a State Board of Health on which there will be just representation of each school of medicine that has in the State a chartered college maintaining an honorable educational standard in medicine, and an incorporated State society. Among its duties, let this Board supervise medical practice in determining a standard of medical education by which to judge colleges in and out of this State. Let no college in the State have power to issue medical diplomas, except as its applicants for graduation passed a satisfactory examination before this Board, and had the authority of the Board indorsed on each diploma. Empower the Board to issue licenses to graduates of honorable colleges out of the State, and to issue *limited* licenses to non-graduates who pass a satisfactory examination before it. In all examinations by the Board, let questions on anatomy, physiology, chemistry, pathology, toxicology, obstetrics, surgery, forensic medicine, diagnosis, and similar topics where medical men have no differences, be passed upon by the entire Board; but on therapeutics, materia medica, and other points where the schools differ, let the representative of each school decide upon the candidates of that school.

By such a law the usual fear of class legislation would be set aside, and educated gentlemen could meet on common ground without compromising their personal opinions—as Presbyterians, Methodists, Baptists, and other religionists meet in bodies for general work. No one school would be at the mercy of others. Incompetency and charlatanism would be driven to the wall, and yet the public would not be prevented employing any competent medical man that suited them. Fraudulent colleges would be stopped, and colleges giving an inadequate education would be forced to raise their standard or to close their doors. Charters could no longer be used for corrupt purposes, and every physician would have to graduate in a worthy college at an early day.

This is the law that the physio-medicalists of Ohio have long advocated. We believe that it covers the entire ground, and contains the very essence that should reside in every law—*justice to all*. It deprives no man of his convictions or his rights, but summarily prevents ignorant and corrupt men from preying upon the lives of others. Physio-medicalists are willing to let their men and their colleges stand or fall under the fair working of such a law as this. In the interests of humanity, and for the honor of medical science, we are ready and anxious

to join hands with all honorable men—be they regulars, homœopaths, or eclectics—to advocate such a law before the Ohio Legislature next winter.

Yours respectfully,

WM. H. COOK, M. D.

Proceedings of Societies.

NEW YORK ACADEMY OF MEDICINE.

A STATED meeting was held November 15, 1883, FORDYCE BARKER, M. D., LL. D., President, in the chair.

The Statistical Secretary announced the death of the late Dr. J. MARION SIMS.

The PRESIDENT spoke as follows: By the death of Dr. Marion Sims, the Academy of Medicine, the profession of this city, and, I may well add, the profession of the country, have lost their most original and brilliant genius in the department of surgical gynecology. This will be conceded by all. Had circumstances forced him to equal activity in other branches of surgery, his fertility and promptness in practical suggestion, his intuitive power of conception of new means to secure any desired result, his endowment of invention, and wonderful mechanical adroitness would undoubtedly have given him equal eminence in all its departments. No one can be compared with him in his own sphere, in which he achieved such great distinction, except the late Sir James Y. Simpson. An intimate relation with both for many years may, perhaps, justify me in saying that there were very many points as to their intellectual and moral qualities which were strikingly characteristic of both. These resemblances were much more numerous than the points of contrast. In the future the greatest fame of one will rest on his courage, and, I may even say, audacity, in successfully introducing anesthetics to relieve the agonies of parturition; in the other, by his genius in devising new methods of physical exploration, and new surgical procedures which effect cures of lesions, which before could neither be correctly diagnosticated nor successfully treated. In thus alluding to the greatest achievements of the two, I should also add both were incessant, zealous workers, who for many years were constantly making positive contributions to our science and our art, many of which would alone establish their claim as great men in our profession; the former perhaps adding more to our scientific literature, and the latter more to the advancement of our art. Neither of them was reluctant to have his good work appreciated. To-morrow morning, I doubt not, every Fellow of the Academy, whose engagements will permit, will be present at the funeral services of our late most eminent associate. The Chair, in accordance with our by-laws, will designate Dr. T. Addis Emmet to read a memoir at the first meeting of the Academy in January.

ON TYPHOID FEVER IN NEW YORK was the title of the paper which was read by Dr. FRANCIS DELAFIELD.

By the mortality tables of the Board of Health he had found that for many years there had been an annual mortality of from one to two hundred from typhoid fever in the city of New York. In the years 1863 and 1866, when typhus fever prevailed, the mortality ran up to 500 and 600 yearly. Since that time the yearly mortality had been from 200 to 400. In 1879 the mortality was as low as 178. In 1881 it was 446. In 1883, up to October 1st, 274. It was most prevalent in the summer and beginning of the autumn, but no month was free from the disease. From January 1, 1877, to October 1, 1883, 1,305 cases had been treated, in all the hospitals in the city. In 1877 the

total number in the hospitals was 135 cases, with a mortality of 27 per cent. In 1878 the total number was 124, the mortality 27 per cent.; in 1879 the total was 114, the mortality 20 per cent.; in 1880 the total was 110, the mortality 30 per cent.; in 1881 there were 319 cases, with a mortality of 22 per cent.; in 1882, there were 313 cases, with a mortality of 23 per cent.; in 1883, up to the 1st of October, there were 190 cases, with a mortality of 26 per cent. Most of the cases occurred in adults; the number of children admitted to the hospitals was too small to arrive at a conclusion as to the relative frequency of the disease at the different periods of life. In adults, however, it occurred most frequently between the 20th and 30th years. He had had little opportunity for getting at the true ætiology of the disease. In a considerable number of cases it had originated out of the city.

At the autopsies, the regular lesions had been found to exist, more or less positively marked. The solitary and the agminated glands of the small intestine had been found either swollen or converted into ulcers, with adherent sloughs, or the ulcers were completely cleaned off at the time of death, and even cicatrizing. The changes, however, even in the worst cases, were confined to the glands mentioned. The large infiltration of the small intestines which occurred in some epidemics had not been observed. In some cases the intestinal lesions were inconsiderable. Peritonitis with perforation had occurred in only a small number of cases, and in one of these it was at the seat of the vermiform appendix. The colon was involved only in a few instances. In these the enlargement and sloughing of the solitary glands were very decided. In the stomach multiple new growths of lymphatic tissue with ulceration were seen only in a single case. The mesenteric glands were swollen in all cases in a degree corresponding to the intestinal lesions. When the glands were unusually swollen there was sometimes a little fibrin on the peritonæum over them, and in one case the peritonitis had become general. Suppuration of the mesenteric glands was observed in two cases. The spleen was soft in all the cases, and usually enlarged; in some instances it was of normal size, and in some even smaller than normal. In one case, that of a boy, it had ruptured. Inflammation of the colon, with symptoms of dysentery, existed in several cases; in one, the dysentery had proved fatal, and the lower two thirds of the colon were found coated with fibrin. Suppuration of the parotid glands was not seen in a single instance. The liver was enlarged, in many cases, with some swelling and degeneration of the hepatic cells. The kidneys, also, as a rule, showed swelling and degeneration of the epithelial cells, and more or less enlargement of the entire organ. Such changes were sometimes accompanied by albumin in the urine during life, and casts in a few cases. The heart was firm, with normal muscular tissue, in the majority of cases; the characteristic flabby heart, with degeneration of the muscular fiber, was seen in only a minority of the cases. The lungs manifested a variety of changes: congestion of the larger bronchi, with increased production of mucus, in many cases; severe bronchitis and broncho-pneumonia only in a few; lobar pneumonia in two. A moderate degree of hypostatic congestion of the posterior portion of the lungs was common. No recent lesions were found in the brain or its membranes. The voluntary muscles, especially those of the anterior abdominal walls, presented characteristic granular and waxy degeneration in only a moderate proportion of cases. It was evident that the anatomical type of the disease, as it had prevailed in New York during the past few years, was not a severe one. The remarks made were based upon the notes of 102 cases, all undoubted examples of typhoid fever occurring during the past five years. During this period there had been many cases of fever of an obscure nature.

A distinct history of the prodromic period was obtained only in 18 of the 102 cases. In these the condition was much the same—*langueur*, headache, indisposition to mental or bodily exertion, loss of appetite, constipation or diarrhœa, irregular chilliness, sometimes bronchitis. The duration of this period had varied from four days to several weeks. The character of the invasion was ascertained in 83 cases. In 37 there was a chill on the first day, mild or severe; it was sometimes repeated on successive days. It was followed by febrile movement, often accompanied by headache, vomiting, nosebleed, and diarrhœa. In 25 cases diarrhœa was among the first symptoms accompanied by fever; sometimes also by headache or epistaxis. Altogether, there were 44 cases in which diarrhœa was one of the first symptoms. In three of these blood was mixed with the passages during the first few days. In 15 cases headache and fever marked the onset. In six bronchitis, with cough and expectoration, was the most prominent feature during the first week. Pain in the right iliac fossa, or over the abdomen, was said to exist in many cases. In the remaining cases it could not be determined exactly how the disease began.

The record of the temperature during the first week was very incomplete. In the cases in which it was taken, during the first week or the latter part thereof, it did not rise in the regular and gradual manner described by some authors. Transfer to the hospital seemed often to produce a rise of a degree or two in twenty-four hours. In some patients there was a morning chill, followed by afternoon fever, and then sweating. In some there were sudden falls of the temperature, continuing for six, twelve, or twenty-four hours, during the first week. In the second week the temperature approached nearer to the type of a continuous fever with moderate morning remissions; sometimes these remissions were decided. In other cases the morning temperature was the highest for the twenty-four hours. In some instances the temperature fell to normal by the fifteenth day, and convalescence began; or, it might again rise after several hours, and the disease continue for several weeks longer. In the cases which terminated fatally in the second week, the temperature reached the highest point either just before death, or two or three days before, in which case it fell to 100° or 101° F. a few hours before death. During the third week the temperature ran much the same course as during the second. In the fourth it showed more marked morning remissions. In some instances, the temperature, having fallen for from one to three days, rose again and continued high one or more weeks longer. The height of the temperature was usually in proportion to the severity of the disease; but to this rule there were many exceptions. Some of the patients bore a high temperature much better than others. The pulse during the first week was regular, full, from 80 to 100. In the second and third weeks it became more rapid and feeble, sometimes dicrotic; as a rule, the more rapid the more feeble; in some instances, however, it was both feeble and slow. Generally speaking, a rapid pulse was an unfavorable symptom, but sometimes the pulse continued rapid while the temperature was falling and convalescence approaching. Where death took place with a low temperature, the pulse was feeble and rapid. Where a slow pulse was associated with cerebral symptoms, the cases closely resembled cerebro-spinal meningitis. The appearance of the patients was usually characteristic; the expression was dull, the skin of the face was dusky, the cheeks were flushed, the mind was sluggish. The tongue was coated down the center with a tinge of white fur, which afterward became yellow-brown, and sometimes fissure occurred; in some, the tongue remained clean; moistening of the tongue was regularly one of the most trustworthy symptoms of approaching convalescence. Delirium of an active and well-marked type was present

in 41 cases, and indicated a severe form of the disease. Lesser degrees of delirium, especially at night, were much more common. There was diarrhœa in 82 cases, and in 44 it began during the first days of the disease. In 11 cases it stopped altogether after the first week. In 20 cases it lasted only a part of the second week. In 51 it continued throughout the entire disease. Constipation throughout the whole course was observed in 18 cases; it was apt to be associated with an excessive degree of tympanites. The eruption was regarded as being well marked in only 44 cases; but Dr. Delafield doubted whether accurate observations were made with regard to this point. The eruption had been more constant the present autumn than for several years past.

With respect to complications, hæmorrhage from the bowels occurred in 23 cases; in six of these it seemed to be the immediate cause of death. The hæmorrhage assumed the characteristic form in most instances, but in three cases the discharges were streaked with blood from the very onset of the disease. In one instance the bloody discharge from the bowel was accompanied by blood in the urine and extravasation of blood under the skin. In two there was a constant running away of blood from the rectum in the sixth week. In the cases in which characteristic hæmorrhage took place it was usually followed within a few hours by a well-marked fall in the temperature. Hæmorrhage was always an alarming symptom. Of twenty-three patients in whom it occurred, nine recovered. In three cases there was a well-marked pustular eruption of the skin, which, however, proved merely a discomfort to the patient. Suppurative inflammation of the middle ear, with discharge of pus, occurred in five cases; severe pharyngitis, with production of false membrane, in one case during the first week of the disease; a moderate degree of catarrhal pharyngitis in a large number. Bronchitis and a severe type of broncho-pneumonia were observed in 24 cases; in 16 it occurred during the first week. In some the bronchial symptoms were more marked than the typical typhoid symptoms. In three it seemed to be the immediate cause of death. There was lobar pneumonia in two cases, which seemed to be the immediate cause of death. Repeated attacks of feeble heart action and syncope occurred in one instance, the patient dying in one of the attacks. Peritonitis occurred in four cases, being caused by perforation in two. Thrombosis of the femoral vein, with swelling of the leg and thigh, occurred in one case. Dysentery set in after convalescence in five cases, proving fatal in one instance.

The duration of the disease was ascertained in 61 cases; in 1 case convalescence began on the 16th day, in 4 cases on the 18th day, in 6 at the end of the third week, in 15 in the fourth week, in 12 in the fifth week, in 4 in the sixth week, in 4 in the seventh, in 1 case in the eighth, in 9 cases in the ninth, in 1 case in the tenth.

There were well-marked relapses in 7 cases, all of which ended in recovery. Of the 102 cases, 34 proved fatal. In 18 death seemed to have been directly attributable to the disease itself. In most of these the temperature ran high—from 104° to 107° Fahr., but not continuously so. The pulse was always feeble and usually rapid. One patient died in collapse, the temperature in the rectum being but 95°. A thorough sponging with ice had been made.

The treatment varied in the different hospitals. In mild cases, in general, the patients were simply put to bed and given milk diet. Some of the hospitals employed peptonized milk. Alcohol in one form or another was given by some physicians in every case; by others its use was reserved for feeble heart-action. Besides alcohol, digitalis, convallaria, and caffeine were frequently employed as cardiac stimulants. Quinine was given to nearly every patient in some of the hospitals; in others it

was given only when the temperature went above 103°; in still others it was hardly resorted to at all. General bathing during the past year seemed to have been almost entirely abandoned. One or two years ago it had been employed to a considerable extent in several of the hospitals. Sponging, or the use of the Kibbee cot, was employed in some of them to a considerable extent; in others, the use of cold water in every form, to reduce the temperature, was abandoned. For tympanites, turpentine, externally or by the mouth, was often employed. For hæmorrhage from the intestines opium and ergot were in ordinary use. When the diarrhœa was excessive, opium, with bismuth or pepsin, and a solution of the acetate of aluminum, were most employed. In one hospital large doses of calomel were given with the idea of aborting the disease. Salicylate of sodium, benzoate of sodium, and a combination of carbolic acid and tincture of iodine, given with the idea of acting upon the poison of the disease, were very little used in the hospitals.

Dr. ALFRED L. LOOMIS had been interested to know what definition Dr. Delafield would give of typhoid fever. The paper had been a painstaking and truthful record of what had been called typhoid fever as it prevailed in New York to-day. Dr. Loomis then reviewed in brief the history of the fever as Dr. Delafield had recorded it, and stated that it did not correspond to that given of typhoid fever by Liebermeister, and others, as it existed on the continent of Europe. By those writers, the disease was represented to have a typical range of temperature, gradually rising during the first week, an even temperature during the second week, remittent during the third, intermittent during the fourth; a characteristic rose-colored eruption appearing between the sixth and the tenth days, each spot remaining for three days, then disappearing, perhaps a new crop taking the place of the old; a pea-soup diarrhœa, a specific poison, that is, originating in matter contaminated by the excrements of the typhoid patient. These characteristic symptoms had not been regularly present in the disease described by the author of the paper, nor had they been present in the cases of so-called typhoid fever which he, Dr. Loomis, had observed in this city for several years past. In the cases which he had seen, the temperature had manifested irregularities, the diarrhœal discharges had not been characteristic, there had not usually been an eruption, at least not rose-color; he had been unable to trace the disease to a definite cause or a definite germ. He then read the history of the disease as it had prevailed in his wards at Bellevue Hospital this year, the histories having been prepared by the house physician. In reply to a question by the President, whether he employed a laxative when constipation was present, Dr. Loomis said he did not.

Dr. F. P. KINNICUTT quoted a statement made by Sir William Jenner some years ago, that one cause of constipation in typhoid fever was believed to be deep ulceration of the intestinal glands. He had studied the cases which had been observed at St. Luke's Hospital, with regard to this and other points, and had concluded that constipation was an unfavorable condition, and might be even of dangerous import. It had the practical bearing that, as he believed, laxatives should not in any case be given by the mouth, as his limited observations confirmed the statement of Jenner. The bowels should be relieved by small enemata, if necessary frequently repeated, rather than the use of larger ones. He was disposed to regard the relapses as due to the remains of the typhoid poison, and not to errors in diet, or other accidental circumstances. His treatment consisted in rest in bed, plenty of pure air, a strictly regulated diet, and medicinal treatment only for special symptoms as they arose.

Dr. E. G. JANEWAY quoted statistics of typhoid fever as it had existed in New York for over a quarter of a century past, which went to show that the disease was not more prevalent at

the present time in proportion to the population. He was of the opinion that what was called typhoid fever as it was at present prevailing was such in fact, and that, while the symptoms might vary more or less, they did so no more than in other contagious and infectious diseases. That the ætiology corresponded to that given in the books was proved by several instances, in which at first, however, its origin could not be traced. During the outbreak at the Catholic Half-Orphan Asylum, a well from which a part of the children obtained their drinking-water was found to be contaminated, and when this was closed the epidemic ceased. In some epidemics diarrhœa was common, in others constipation was more frequent, but similar pathological lesions were found in each, the characteristic lesions of typhoid fever as they existed in the intestines, though, perhaps, differing in severity. The mortality also varied in different epidemics. The European writers also described an atypical as well as a typical course of the disease.

Dr. T. A. MCBRIDE spoke of his experience at the Out-door Department of the New York Hospital. Whenever a patient presented himself with diarrhœa he took the temperature, and almost invariably found it elevated, the spleen enlarged, the liver sometimes enlarged, and nearly always the eruption of typhoid fever. Some of the patients entered the hospital, and remained for a variable period of time, but usually the disease proved of a mild type. When hæmorrhage occurred from the bowels, there was almost invariably albumin in the urine, unassociated with tube-casts. He had employed kairine for reducing the temperature, in seven-grain doses every hour, until the temperature fell to 101°, which it usually did in a short time; and, on the slightest signs of its rising again, the drug was administered. Kairine also usually produced copious perspiration after a few doses. He did not wish to reduce the temperature below 101° with the drug, lest a chill should occur. When used in small doses no bad results had followed. He had found the urine frequently to contain peptones.

Dr. KINNICUTT had employed kairine in the manner suggested by Dr. McBride, and with excellent results. There was a tendency to almost immediate elevation of the temperature on ceasing the administration of the drug.

Dr. HOWARD PINKNEY had employed sulphurous acid with benefit in cases of typhoid fever.

Dr. J. H. FRUITNIGHT gave the statistics of some cases of typhoid fever observed in private practice.

The PRESIDENT said, with regard to laxatives in constipation, that, as a rule, he objected to administering anything which would disturb the bowels, but, when constipation continued, and became positively a discomfort to the patient, he gave a single dose of five grains of calomel well rubbed up with fifteen grains of bicarbonate of sodium, and had found it prove most beneficial.

Dr. ALFRED C. POST inquired whether gurgling was observed in the right iliac fossa in cases where constipation was present.

Dr. DELAFIELD, in closing the discussion, said that it was known that typhoid fever presented variable symptoms in different cases, as was also true of other infectious diseases, and thought that Liebermeister had been the cause of much false impression in stating so positively a definite range of temperature and course of symptoms in general; his descriptions were more fixed, definite, and positively stated than the natural course of the disease warranted. He did not think that constipation had anything to do with the size or number of ulcers in the intestine. He also thought it doubtful if the lesions produced diarrhœa, or whether this was not due more to other causes. Constipation was regarded as an unfavorable sign. He saw no reason why a laxative should not be given early in the disease, and he was in the habit of doing so, and with good results. It

was better to give a laxative than to allow the colon to become distended with fecal matter, as it often did. In answer to Dr. Post's question, there were usually tympanites and gurgling in the cases in which constipation was present. He agreed with Dr. Kinnicutt that the relapses were probably due to the typhoid fever poison rather than to incidental causes.

NEW YORK SURGICAL SOCIETY.

A STATED meeting was held October 9, 1883, THOMAS M. MARKOE, M. D., President, in the chair.

CICATRICIAL CONTRACTION FROM A BURN.—Dr. A. C. Post presented a boy, two and a half years of age, who was admitted to the Presbyterian Hospital on the 17th of September. One year previously he had been burned by falling against a stove. Only one finger of the left hand was injured—namely, the index, which was bent and held by a cicatricial band. The right hand was burned much more severely; the thumb escaped, but all the fingers were contracted, the amount of contraction diminishing from the index to the little finger. The last joint of the index finger was bent at quite an acute angle. Dr. Post divided the bands of cicatricial tissue through the entire thickness of the indurated parts at intervals of about three or four millimetres, and was able to bring the fingers into a straight position. The operation was performed on the 18th of September upon both hands. The splint was removed from the left hand on the 24th of September, and had not been reapplied. The splint had not been omitted from the fingers of the right hand, although they were perfectly straight and the tissues were flexible. The treatment consisted in free multiple incisions through cicatricial bands, forcing the fingers back and applying a narrow splint of malleable iron covered with tissue-paper, extending upward to about the middle of the forearm. Recently Dr. Post had treated the operation wounds in this class of cases by first dressing the parts with carbolized oil or vaseline, and at subsequent dressings sprinkling them very freely with nitrate of bismuth to fill up all the interstices between the incisions. He had found that the bismuth dressing answered an exceedingly good purpose. The granulations had been kept down in this manner, and the wounds had been maintained in a remarkably healthy condition, with but very little suppuration.

EXCISION OF A PORTION OF THE SPINAL ACCESSORY NERVE FOR SPASMODIC TORTICOLLIS.—Dr. H. B. SANDS presented a man, thirty-nine years of age, who had consulted him in May, 1882, on account of the disease, which first appeared nine months previously. The attacks of spasm were at first less frequent than they became subsequently, and produced a rotary movement of the head, causing it to turn forcibly toward the left side. No effort upon the part of the patient could prevent this movement. In the beginning, the turning of the head occurred about once in three minutes; subsequently it became more rapid, and it was estimated that the intervals between the movements did not exceed three seconds. Before he came under Dr. Sands's care he had been treated by Dr. Segnin, who had thoroughly administered hyoseyamine, the bromides, atropine, conium, and other remedies, but without any beneficial result. The patient when Dr. Sands first saw him was quite weak, and the contraction of the sterno-mastoid upon the right side was almost constant. It was decided to excise a portion of the spinal accessory nerve, which was assented to. In a previous operation he had followed the plan suggested by the late Mr. De Morgan, of making an incision along the posterior margin of the sterno-mastoid muscle, exposing the nerve and tracing it forward, but he had found this procedure difficult and unsatisfactory. He therefore determined to try an operation by which the nerve could be reached not far from its exit from the skull, just in

front of the point where it penetrates the muscle. He made an incision three inches in length along the anterior margin of the sterno-mastoid, beginning close to the mastoid process. After exposing the muscle and turning it outward, he readily found the spinal accessory nerve, where it crosses the internal jugular vein, which was felt, though not seen, during the dissection. A piece of the nerve one fourth of an inch in length was excised, and the wound was closed by sutures and covered with an iodoform dressing. Healing by adhesion was complete on the 24th day of May, nine days after the operation. Immediately after the operation the sterno-mastoid ceased to contract, and it was now paralyzed and atrophied. The patient, however, did not recover immediately from the torticollis, as there still remained a marked tendency to rotation of the head toward the left side, this being due mainly to contraction of the left splenius muscle, which could be felt as a thick, hard mass. On the 7th of June, however, the condition of the patient was very much improved, and by the middle of June he was nearly free from spasm. For six months afterward he continued to suffer at intervals, and regained entire control of his movements only after going into the country, and improving his general health. Even now he occasionally found that his head was disposed to turn to the left side, but he had no difficulty in preventing this movement, or in turning to the right. Considering his distressing condition when he came under Dr. Sands's observation, the result must be regarded as quite satisfactory.

Dr. Sands also presented another patient, aged thirty-one, upon whom he had performed a similar operation and removed two fifths of an inch of the spinal accessory nerve on the 25th of June of the present year. The patient had been engaged as an expressman for fourteen years, during which time it had been his habit to carry trunks upon his right shoulder, turning his head well toward the left side, thus, in his opinion, laying the foundation of his disease. Four or five months before he came to Dr. Sands he began to experience some difficulty in turning his head to the right side, and also became subject to clonic spasm of the muscles which turn it to the opposite direction. Seven weeks before the operation he was treated by the application of the actual cautery along the course of the affected muscle, but without any good effect. This treatment, however, was followed by tonic spasm of the muscle, so that from that time there was no longer a rotary movement, but an extreme rotation toward the left side, so that his face looked over the left shoulder. The case then resembled one of ordinary torticollis more than one of clonic spasm. In this instance the discovery of the nerve at the time of the operation was more difficult than in the former one, and the internal jugular vein was more distinctly exposed. The wound healed without suppuration, and on the 18th of July the man left the hospital much improved. As in the other instance, the sterno-mastoid and trapezius were paralyzed, yet recovery was gradual. For several weeks he had some difficulty in keeping his head in the proper position. He was now, however, quite well. In this case, two or three weeks after the operation it was noticed that the head was still inclined to turn toward the left side, the left splenius, the trachelo-mastoid, and the inferior oblique being probably the muscles contracting.

Dr. Sands believed that it was usual in cases of spasmodic torticollis to find that the sterno-mastoid was not the only muscle affected. In a case reported by Mr. De Morgan many muscles were involved, including those of the eyeball. Dr. Sands had seen a case about a year ago in which the integument could be observed to be raised during spasmodic contractions of the omohyoid. The cure by division of the nerve seemed to be effected gradually, and to be due to the cutting off of the nervous supply of one of the principal muscles involved in the disease. He

did not feel certain of a permanent result in either of these cases, but the condition was now such as to afford great encouragement. He regarded the operation by dividing the nerve anteriorly as far better than that suggested by De Morgan, because by cutting in front the nerve could be reached before it divides into two branches, and a portion of the common trunk excised quite near to its exit from the skull.

Dr. F. LANGE had had a similar case, in which he gave temporary relief by stretching the spinal accessory nerve. The benefit remained for only a few weeks. It was evident that the clonic spasms were mostly due to the action of the muscles at the back of the neck on the opposite side, and he therefore finally cut through the principal muscles upon the opposite side of the neck, which gave an apparent cure for a shorter period of time. But the trouble then recurred, although to a somewhat lesser degree; what the final result was he was unable to state. It was certain that in this case the action of the sterno-mastoid was entirely paralyzed by the stretching of the nerve. The muscle had been divided frequently by other surgeons previously to the stretching, yet it acted well before Dr. Lange performed his operation.

FOREIGN BODIES IN THE AIR-PASSAGES.—Dr. R. F. WEIR presented a patient and related the case. [The case has already been given in this journal. See p. 404.]

Dr. Weir also reported a case, that of a child, two years of age, who inhaled a coffee-bean two days previous to the one just reported, and in whom he performed also tracheotomy for its extraction. When the patient was first seen the house surgeon was about to perform tracheotomy, but just as the skin was divided the child suddenly ceased coughing, and breathed so easily that the operation was abandoned on the supposition that the foreign body had been removed. Two hours later, however, when Dr. Weir first saw the case, the child was breathing with considerable difficulty. He then opened the trachea, searched above and below, but did not feel the foreign body. A suture was introduced on each side of the opening, so that the edges of the wound could be held open if at any time it became necessary to explore the trachea further. The progress of the case proved that this was a wise precaution, for, soon after, the child was found breathing very peculiarly, the tube which had been introduced was withdrawn, the wound in the trachea was held open by means of the sutures, and out popped the roasted coffee-bean considerably swollen. Pneumonia developed, and the child died on the fourth day afterward.

Dr. SANDS said that an unsuccessful attempt to explore the trachea by means of the finger in Dr. Weir's case recalled to his mind a case which occurred many years ago in St. Luke's Hospital. The man had a portion of an India-rubber tracheotomy-tube lodged in the left bronchus, and some difficulty was experienced in determining exactly where the foreign body lay. In that instance Dr. Sands passed his finger down through the tracheal wound and immediately detected the foreign body just below the point of bifurcation. A forceps was then inserted and the foreign body extracted. Since making this discovery he had often demonstrated upon the cadaver that he could pass his finger into the trachea always as low as the place where it divides, often being able to cause the extremity of the index-finger to enter either bronchus a distance of half an inch.

The PRESIDENT remarked that these cases illustrated one point in diagnosis which had interested him. In a case which he had had some time ago, one in which a shirt-button had passed into the right bronchus, which he extracted with the forceps after tracheotomy, Dr. J. R. Leaming made the diagnosis as to the situation of the foreign body. In that instance the obstruction was manifestly in the two lower lobes of the right lung, the upper lobe being perfectly resonant, and the respiratory mur-

mur distinct. In the case which Dr. Weir had now reported the position of the foreign body was determined by the fact that the whole left side showed absence of respiratory murmur. In the right bronchus, the bronchial branch going to the upper lobe sometimes came off very near to the bifurcation, and from this point there was quite a distance before the next division took place. It was between the first branch and the second point of division of the bronchus that the foreign body lodged when it entered the right bronchus. When it entered the left bronchus there was no branch until the tube broke into its final divisions, nearly two inches from the trachea, and, therefore, when this left bronchus was obstructed, the entrance of air to the whole of the left lung was prevented.

REMOVAL OF THE ENTIRE TONGUE, THE SUBMAXILLARY AND SUBLINGUAL GLANDS, AND THE LATERAL WALL OF THE PHARYNX BY KOCHER'S METHOD; CURE.—Dr. W. T. BULL presented a man, forty-one years of age, who had been in good health up to four months before admission to the hospital. At that time he observed a small ulcer on the left side of the tongue, and at the same time a swelling under the jaw. Both increased rapidly in size, the tongue becoming hard about the edges of the ulcer, and causing severe pain at night and while eating. His appetite had continued good, and he had not materially depreciated in weight or strength. On examination, a ragged, excavated ulcer was found on the left side of the tongue about its middle, reaching upward to the dorsum, and backward as far as the palato-glossal fold, along which it extended to the mucous membrane covering the posterior edge of the internal pterygoid muscle. Its edges were indurated, its surface was sloughy, and the discharge was sanious. The submaxillary gland formed a mass of twice its normal volume, but was not hard nor tender. There were no other enlarged glands. A piece taken from the edge of the ulcer proved under the microscope to be epithelioma. The operation was done August 11th, a preliminary laryngotomy having been performed, and the pharynx stuffed with sponges on strings. By raising a triangular flap, the submaxillary triangle was explored, the facial artery and vein were ligated, the submaxillary gland was removed, then the lingual artery and vein were tied, and the sublingual gland, with one half the tongue, was removed with the scissors as far back as the hyoid bone. The other half was removed in the same way, as well as the mucous membrane of the pharynx beyond the posterior pillar of the fauces, and as low down as the hyoid bone, including that covering the inferior and posterior part of the pterygoid muscle. A hard, enlarged gland was now found under the sterno-mastoid, closely adherent to the carotid sheath, and was extirpated. Several bleeding spots were touched with the cautery.

The only nourishment given during the first twenty-four hours was two enemata of beef peptonoids with whisky. After that the stomach-tube, with a funnel attached, was introduced twice daily, the gauze in the mouth being removed each time. Between two and three pints of milk, and afterward beef-tea, soup, and milk-punch, were administered at one time. The iodoform gauze was not changed till the sixth day. After that the gauze in the mouth was discontinued, and the iodoform gauze removed once or twice daily, the granulations being sponged with the boro-salicylic solution. There was no constitutional reaction, the pulse not going above 90, nor the temperature above 99° F. On the fourth day the man sat up for several hours. On the seventeenth day he took food himself, although the wound would admit three fingers. The discharge was moderate, and never offensive. The wound was of the size of a goose-quill at the end of five weeks, reduced to a trifling sinus a week later, and entirely closed at the end of seven weeks.

(To be concluded.)

NEW YORK NEUROLOGICAL SOCIETY.

A REGULAR meeting was held October 12, 1883, the President, Dr. WILLIAM J. MORTON, in the chair.

THE NEUROTIC ORIGIN OF PROGRESSIVE ARTHRITIS DEFORMANS.—Dr. LEONARD WEBER read a paper in which he briefly recapitulated the symptomatology and ætiology of the disease, and stated his views concerning its nature. He said that, among the comparatively large number of cases of arthritis deformans which he had seen in the course of the last twenty years, he could not but recognize sorrow and grief, fright, irritation, and exhaustion of nerve-centers by sexual indulgence and the leading of a dissolute life—factors just as potent in producing the disease as rheumatic influences, if not more so. Again, remembering the symmetrical appearance and progress of the disease in most cases, no more plausible explanation seemed possible than the supposition of causes located in the central nervous system. The neuralgic and tropho-neurotic symptoms also supported this view, though it was not to be forgotten that in a spine stiff and deformed by arthritis there might easily occur changes of innervation producing neuralgias and tropho-neurotic alterations secondary in character. Finally, the negative results which he had had in treating polyarthritis deformans after the usual anti-rheumatic method, with iodides, colchicum, etc., and, on the other hand, the very positive results obtained in similar cases by the galvanic treatment of the central nervous system, combined with a generous diet and the persistent administration of cod-liver oil and iron, had led him to believe in the neurotic origin of the disease in many cases. It was through the failure of the old method that he first became convinced of the erroneousness of the conventional opinion of the rheumatic or gouty origin of this formidable malady. Up to the present time no autopsies had been made with reference to the condition of the nerve-centers in this disease, and it would be a fit subject for future research to find the changes in the cord, presumably in the anterior horns, which might induce certain forms of arthritis deformans.

With regard to the main features of the disease he had this to say: As a rule it began and developed very slowly, without any other symptoms at first than pains in one or more joints, which came and went either spontaneously or after exertion. Not infrequently the patient complained at this early stage of an unusually tired feeling in the joints. The pains were neuralgic in character, circumscribed or diffused through the limb. In the peripheral form, the joints of both hands and feet, in the central variety, the hip, knee, and spine, were the parts affected. In the course of time a great deal of stiffness and discomfort were experienced. The joints were enlarged and became unshapely by the proliferation of hard, osseous protuberances on the outer surface of the swollen epiphyses, and creaking or cracking in moving or handling them was perceptible to the patient as well as to the physician. The adjacent soft parts, particularly the muscles, showed, in a comparatively early stage of the disease, a degree of atrophy not at all commensurate with their passive condition alone, but much more due to peculiar nutritive changes of neurotic or myotic origin.

In the peripheral form, the disease affected the joints almost symmetrically on both sides; in the central form, the advance was irregular. In one case he had seen it remain stationary in the hip joint for many years, but attacking some joints of the fingers and toes at last. In another case, that of a female patient about thirty-five years of age, the upper part of the body only was affected. He had now a case under observation where nearly all the joints in the body were badly affected when he first saw the patient, who had been a helpless cripple for many months. The disorganization of the shoulder, knee, and particularly the hip, led often to a considerable shortening. In

one of his cases, still under observation, the shortening of one lower limb amounted to nearly three inches.

In the spinal vertebræ ankylosis was more quickly developed by the disease than in other parts of the body. One of his patients could neither bend nor turn her head when he first saw her, the entire spine being stiff, but there were no symptoms of compression, or even of remarkable irritation of the cord. The disease was slowly but steadily progressive; while it might remain stationary for a length of time, exacerbations were sure to follow. Fever or other great constitutional disturbances he had not noticed in its course. In a female patient, aged thirty-seven, he had found the urine to have a specific gravity of 1.026, containing some sugar, and phosphates in abundance. Her mother had diabetes, and was a sufferer from arthritis deformans at the same time.

The following cases were selected from his records, as illustrative of the points he wished to bring out:

CASE I.—Mrs. M., aged forty-seven, American, no syphilitic or hereditary taint, but a sister is reported to be a sufferer from chronic rheumatism. Married early in life, went on the stage, and, as a somewhat prominent actress, led an active and varied life, experienced many changes of fortune, traveled a good deal, and never hesitated to expose herself to wind and weather, yet always enjoyed good health until two years and a half ago, when, after a premonitory period of worry and depression of spirits, she experienced pains in both wrists and elbows, followed by swelling and distortion. The hands and feet soon followed, and, when he saw her first, February 27, 1883, she had not a joint that did not creak or crack or was not out of shape, except those of the clavicle and the lower jaw. The knees and spinal vertebræ were in the worst condition and the most painful. Standing or walking, even with support, was out of the question. Her urine contained phosphorus, but no albumin. She slept poorly, and her general nutrition was bad; the bowels were irregular. No treatment had so far done any good, but the disease had made rapid and steady progress. Ordered:

R. Propylamini (trimethylamini), f 3 j;
Oleosaceh. citri, f 3 ij;
Aqua, 3 viij.
M. S. A tablespoonful before each meal.

Ordered, also, two pills of sulphate of iron and carbonate of potassium after each meal; good food, and a tablespoonful of cod-liver oil three or four times a day. Galvanism to the spine and the cervical ganglia of the sympathetic three times a week. The local and general improvement had been so satisfactory that she was now able to get up and around with the help of a cane, and to do light work with her hands. The pain, swelling, and distortion of joints were much less; sleep and nutrition were greatly improved.

CASE II.—Mrs. K., aged thirty-four, German, married twice, had had two still-births and two abortions; second husband had syphilis, and died of phthisis. She presented no signs of either disease; no hereditary influences. In 1877-'78 she had a severe attack of bronchitis, that troubled her the whole winter, but eventually got well without any apparent damage to the lungs. After some years of trouble, anxiety, want, and exposure, arthritis deformans broke out two years ago, with pain and swelling of the small joints of the hands and feet, soon spreading to one knee, shoulder, and hip. The disease was preceded by severe headaches, from which she suffered yet occasionally, but less violently. Some of the joints presented a gelatinous feel, and several nodules could be felt beneath the integument of her arms. There was no pain on pressure over the sternum, the clavicle, or the tibia. Neither specific nor so-called anti-rheumatic treatment was of any service, but the disease had been very tardy in its progress, and the disfigurement of the joints was not to be compared to those in Case I. She had always been able to walk, though not without pain, and from time to time been confined to her room. Her appetite and general nutrition were not good. The treatment described in Case I was begun in January, 1883, and carried out pretty regularly up to the present time, except as to the application of electricity. The result thus far had been

satisfactory; the progress of the disease had been stopped; and the pain, swelling, and disabilities of locomotion were much less.

CASE III.—Mrs. K., aged thirty-five, American; married, multipara. Father in good health, mother suffering from diabetes and arthritis deformans. Patient well built and nourished; living in good circumstances; had been for some years very unhappy in her domestic relations, and had been often deprived of rest and sleep, and otherwise maltreated. After a series of premonitory symptoms, such as hemierania and neuralgia in the upper extremities, she showed the first symptoms of the disease in the fingers, wrists, and shoulders about a year ago. Her urine contained phosphates (in large amount) and a little sugar. The affection had made no great progress as yet, and the treatment had not been carried out well enough to be of great service, owing to irregular attendance on the part of the patient.

CASE IV.—Mrs. H., aged fifty-five; multipara; no hereditary taint; no apparent cause other than a good deal of anxiety and grief on account of the persistent ill-behavior of her only son. The first symptoms appeared in the small joints of the fingers and toes five years ago. So far, she had not experienced any great inconvenience from her affliction, but, whenever she took the propylamine mixture and cod-liver oil for some time, great relief followed as to pain and swelling.

CASE V.—Mrs. S., aged sixty-five, German; married, multipara; no hereditary taint, but a good deal of exposure to rheumatic influences in her younger days. The disease first attacked her right hip joint fifteen years ago, which led in the course of time to a shortening of nearly three inches, and now to complete ankylosis. No other joints had suffered until recently, when several small joints of the hands and feet became affected, and she had to take to her bed. Various sorts of treatment were employed to no purpose. For the last three months she had been taking propylamine, and the compound syrup of the hypophosphites, with the result that she was now able to be about again, and that no other joints had been attacked.

CASE VI.—Mr. G., aged sixty, Austrian, clergyman, single, of good constitution and no hereditary taint. He had served as a missionary in his prime, and had traveled extensively in South and Central America. He was, of course, exposed to the severe effects of unwholesome climates, and suffered many hardships besides. He had severe attacks of rheumatism, of which he got well, but eight years ago it settled in his right hip and left knee, and when Dr. Weber first saw him, five years since, he was in constant agony, confined to his bed for many months, and the joints mentioned presented all the characteristics of advanced arthritis deformans. Some of the joints of his hands and feet had also become recently affected. His urine contained albumin in considerable quantity; there were amblyopia, the ophthalmoscopic examination showing the affection of the retina often found in Bright's disease and atheroma. By the use of the iodides and the other remedies, he was but little relieved, but two seasons at the Hot Springs of Virginia removed the severe recent affections of the joints, relieved his kidney trouble, and considerably improved his sight. The old affections of his hip and knee remained as before, but ceased to give him much trouble, so that he was able to be about and attend to his clerical duties.

Dr. E. C. WENDT, in opening the discussion, said that he had seen a number of cases of arthritis deformans, mostly in hospital practice, all of which had, under the usual plan of treatment, gone on from bad to worse. He had also seen one of Dr. Weber's cases, in which a marvelous result had been obtained, in a comparatively short time, by an entirely different plan of treatment. He thought the value of Dr. Weber's paper lay mainly in the therapeutic suggestions which it contained. If other observers corroborated the ideas here advanced, a decidedly progressive step would have been taken. He thought it was important to elucidate the causation of the disease: mere symptomatic treatment was quite irrational.

Dr. C. L. DANA remarked that the few cases seen by him had not illustrated the neurotic origin of the disease. In New York the disease, he thought, was rarely met with in private practice. He had seen only a few cases in hospital and dispen-

sary service; this was even true in the Marine Hospital for Sailors, where rheumatism abounded. He recollected having seen one aggravated case: the patient was an old woman, some seventy years of age, who had suffered from the disease for sixteen or seventeen years. It began in the vertebral column, and gradually involved the hips, knees, and toes. She was so helpless that, in order to evacuate her bowels, it was necessary to place her in the horizontal position over a pail. She had Bright's disease, and died of apoplexy. On post-mortem examination deposits of urates were found in the joints of the great toes. The patient was poor, and surrounded by all the conditions favorable to the development of the disease. Dr. Dana said he had seen some women of a neurasthenic type—women who had suffered from functional nervous disturbances—who developed a kind of inflammatory swelling of the fingers, so that in one case the hands became almost useless. He did not know but that, later on in life, these cases might develop into arthritis deformans, and, if so, would illustrate the theory advanced in the paper. In considering neurotic inflammations of joints, Dr. Dana thought the relation of the trophic nerves to them, if there were any trophic nerves, should not be lost sight of. Never, so far as he knew, had we found any articular disease following from functional nervous trouble. The nervous difficulty must be organic. In no experiment upon animals, except where an organic lesion of the spinal cord had been produced, had we been able to produce arthropathies.

Dr. WENDT did not know that the author's paper contained any evidence that the disease was developed from an organic lesion of the spinal cord. If there had been such disease of the spinal cord, improvement could not have been so rapid. He thought the neurotic condition was not the ultimate, but an intervening cause. If we would go back sufficiently far into the history of these cases, he thought we should find that there was at first a disturbance of nutrition, on the basis of which the neurotic condition developed.

Dr. F. A. BURRALL wished he could add something to our knowledge of this subject. The disease was one we were continually meeting. It seemed to him to be an arthritis resulting from trophic changes. In two cases which he could now call to mind, these changes resulted from worry. One patient had gouty trouble. There was no uric acid found in the urine of patients suffering from arthritis deformans. As far as remedies were concerned, he knew of only two—arsenic, which was a nerve-tonic, and *Eupatorium perfoliatum* (boneset).

The PRESIDENT felt like adding a word in regard to the practical part of the paper. He had not seen many cases of arthritis deformans in private practice; he could only recall five. It was probable that most cases were seen by the general practitioner. In the first four he had met with unsatisfactory results; but in the last, becoming convinced of the fruitlessness of the anti-rheumatic plan of treatment, he had administered cod-liver oil, iron, and static electrization with great benefit to the patient. He was of the opinion that the disease occurred most frequently in the so-called neurasthenic. It was interesting to note that the first advocate of the neurotic origin of the disease was an American, Dr. J. K. Mitchell, the father of Dr. S. Weir Mitchell, now of Philadelphia. At this very early date, 1834, Dr. Mitchell announced it as his theory that acute, subacute, and chronic rheumatism were diseases of the spinal cord. The neurotic theory of the origin of the disease in certain subacute forms was a very attractive one. He was prepared to admit, as an argument in its favor, that the ordinary anti-rheumatic treatment failed to relieve the patient. In the next place, there was a well-understood relationship between the disease in question and well-recognized nervous ailments. We had only to call to mind the arthropathies of the myelitis of traumatic neuritis in certain

hemiplegiacs to find a defensible relationship to the changes in the joints characteristic of arthritis deformans.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Meeting of October 24, 1883.

THE USE OF *CACTUS GRANDIFLORUS* IN CARDIAC AFFECTIONS.—The following paper was read by Dr. M. O'Hara:

I was called to see E. O'Hara, aged seventy-four, May 19, 1883. He had bronchitis and some œdema of the lungs; his feet were slightly anasarcous; there was no kidney difficulty, though he passed but little water; he had a mitral regurgitant murmur; some irregularity of heart's action; occasional intermission; pulse 90; he had arcus senilis and atheromatous arteries, as shown in the radials and temporals. The diagnosis was dilatation and failing heart, compensation gone by. He was given digitalis, iron, and nux vomica. He became more swollen generally, had orthopnea, and suffered very much, the heart becoming very intermittent on the least effort. The treatment was kept up, with the addition of saline laxatives for extreme costiveness. He was going downward daily, and on June 22d the pulse was very intermittent, and only thirty-four beats to the minute; he was very water-logged in the lungs and over the whole body. I had only seen him at intervals of several days, but still kept up the digitalis, as it is accounted a sure means of restoring compensation to a heart failing from dilatation, after hypertrophy has gone to its maximum. I thought I could be no worse off with any other medicine, or make less speed, and I recalled the fact that I had seen in Flint's "Clinical Medicine," page 223, the statement made that the *Cactus grandiflorus*, in from three- to five-minim doses, was a valuable heart tonic, and concluded to give it a trial. I ordered it in five-minim doses of the fluid extract (Parke, Davis & Co.) every four hours. In a few days every symptom improved, the dropsy disappeared, and he could lie down at night to sleep. He has been taking the medicine now for five months—the last month fifteen minims three times daily; he feels quite improved; the dropsy has left him; he has the mitral murmur yet, and some irregularity, but rarely an intermittent pulse. I am satisfied that if I had kept on with digitalis he would have died. Dr. McElroy saw him the day I changed to the cactus, and considered him as a man dying from heart failure, and that he could not live for four hours. He expressed his amazement at seeing him alive and so much improved two weeks later. I also gave the history of the case to Dr. Eskridge, and asked him to visit the patient a month ago, but, unfortunately, have mislaid his note.

On another occasion (in the case of a patient similarly affected) I used digitalis, and it failed me. The Rev. Mr. V. has hypertrophy with dilatation, commencing mitral degeneration, also commencing aortic-valve disease; has pronounced mitral-valve regurgitation; he had violent palpitations, irregularity of pulse, and intermissions; pulse between 40 and 50. Here, I am satisfied, digitalis and convallaria aggravated matters, while the cactus relieved the pain, stimulated the heart, and removed irregularity. The heart never comes up above 50 to the minute, but the horrible feelings of death, with the sudden stoppages, are relieved. In this case there was considerable gastric disturbance, and I assisted with pepsin and strychnine, and I wondered why digitalis failed, attributing it in part to its irritating effect on the stomach, thus disturbing the heart reflexly.

In the case of Mrs. Lynch—dilatation with failing heart from age, sixty-five years—I have used nothing else, and it has satisfied me. This person had vertigo, anemia of the brain, dropsy, etc., all due to the failing heart, and the use of cactus inclines me to think it was a good cardiac tonic.

I recall one case of a fatty and dilated heart in which at one period, before an attack of angina pectoris, digitalis had no good effect, yet after that it served very well in the case as a tonic for the heart. Digitalis is a cardiac tonic, acting on the nervous ganglia of the heart, influencing its muscular substance. We shall only find out all its ways by clinical experience. I have tried caffeine for similar heart cases, and sometimes produced no benefit with it. Belladonna and cannabis indica have assisted me in these weakening hearts, especially if I associated these remedies with strychnine. I introduce cactus to the notice of the society, because I have found it to have been little used. Many physicians, if they have like experience to mine, must recall the fact that digitalis at times disappoints them, and I would ask them to try this under those circumstances as a substitute. Of course, I have not had much experience with it, and I would like the result of my experience to be confirmed by that of others.

In nervous affections of the heart I find it very useful; palpitations and neuralgic feelings of soreness about the heart. There are two preparations—*Cactus grandiflorus* (night-blooming cereus) and *Cereus Bonplandii*—of apparently the same qualities, the latter of which I have made no use of. The only information I have obtained about these remedies is on a fly-sheet from Parke, Davis & Co., Detroit, Michigan, which refers to its use; physicians, under their own names, speaking of it eulogistically as a complete substitute for digitalis, merely from their clinical experience. This I would not be willing to concede, though we may meet with patients who, from idiosyncrasy or other unexplained cause, can not be benefited by digitalis.

Dr. Fothergill says ("The Heart and its Diseases," p. 287): "The systole is more complete, the chamber is more efficiently emptied, and, consequently, it is not so soon refilled, so that the requirements of the ventricle in diastole correspond to the slower rhythmic discharges, and a slower pulse-rate is established; while the pulse is firmer and less compressible, the arteries are better filled with blood; at times digitalis will notably lower the pulse-rate under other circumstances than those mentioned, illustrating its effects upon the discharging cardiac ganglia. When the pulse-rate falls very markedly under its use, as when it falls below 50, it would be well to substitute belladonna, squill, strychnine, or casca for it." P. 291: "In cases of right-side dilatation, whether from mitral disease or lung changes, it is well to bear in mind the co-existent embarrassment of the respiratory centers, and to combine with digitalis, ammonia, nux vomica, or belladonna.

I will merely allude to other remedies stated to possess an allied action to digitalis—the *Cereus Bonplandii*, introduced by Parke, Davis & Co.; Lauder Brunton has found casca, the ordeal poison of Africa, to have a nearly similar action; Professor Frazer has used the *Strophanthus hispidus*; M. Brandoun found the dajask, or arrow-poison of Borneo, to kill with the heart firmly contracted in systole. These I am not familiar with in practice, but often have used the *Scilla maritima*, which is an excellent diuretic in cases of feeble pulse. The same can be said of scoparium, or broom. Caffeine, though highly spoken of, I have not found to merit the laudation accorded it as a cardiac tonic, though I have frequently found benefit in substituting belladonna when digitalis seemed, from unknown reasons, to fail me.

Convallaria maialis has been written of so recently in the Pennsylvania State "Transactions" by our member, Dr. Bruen, that I merely refer to that article.

My limited experience goes to show:

1. That cactus is a pure cardiac tonic, whether for functional or organic disturbances, especially in cases of mitral regurgitant disease.

2. Convallaria, though not of service in cases accompanying mitral regurgitation, appears specially, from Dr. Bruen's paper, to be a supplement to digitalis, not replacing it; specially serviceable in backward distension of the lungs, from mitral obstruction, and is a fine tonic for nervous and functional disturbance of the heart.

3. Belladonna and strychnine will frequently serve to take the place of digitalis.

4. Caffeine citrate has been found to be of no effect in my experience for heart affections, functional or organic.

Reports on the Progress of Medicine.

OBSTETRICS AND GYNÆCOLOGY.

By ANDREW F. CURRIER, M.D.

THE CONDITION OF THE UTERINE MUCOUS MEMBRANE DURING MENSTRUATION.—Wyder ("Zetschr. f. Geb. u. Gyn.," ix, 1), in an interesting article, contributes the results of his labors in this field, together with a *résumé* of the by no means abundant literature of the subject. Among his co-workers, Mörcke and de Sinéty have reached almost identical conclusions, though working at the same time, without knowledge of each other. The writings of Kundrat, Engelmann, Williams, and Leopold, especially the last mentioned, also evince careful investigation of the subject. All of these writers admit that more work is yet required in order to a thorough understanding of this matter. All, excepting Mörcke and Sinéty, agree that during menstruation the uterine mucous membrane is stripped of its epithelium, and is converted into the condition of a wound. Williams asserts that this stripping involves the entire mucous membrane; the other authors claim that only its superficial layers are lost. In the matter of the fatty degeneration of the mucosa menstrualis, Williams, Kundrat, and Engelmann consider that it is the factor, above all others, which leads to hæmorrhage; Leopold, on the other hand, considers that it occurs in consequence of the hæmorrhage, which is the primary element, which is shown by the widely dilated capillaries, and the relatively poor supply of veins in the mucous membrane at the menstrual period. That portion of the mucous membrane which is not removed is in a state of cell-hyperplasia; hence we are able to understand how the lost tissue is restored. According to Kundrat and Engelmann, the renewed membrane is analogous to the decidua, and in it, according to the author (Wyder), are many interglandular cells, some of which contain nuclei. Mörcke's views concerning the loss of epithelium during menstruation are stated in the following propositions: 1. The mucous membrane does not disappear, either wholly or in part, and it retains its cylindrical epithelium. 2. Interglandular cells are neither increased in number nor enlarged, and fatty degeneration occurs only to a limited extent. 3. The vessels are greatly dilated, and extravasations into the upper layers of the mucous membrane occur. The foregoing statements are based upon investigations made upon living subjects at different periods of menstruation. Sinéty observes that the distinguishing characteristic of the menstrual fluid is the presence of white corpuscles or their embryonal elements. The author's conclusions from his own investigations, and an analysis of the published cases of Leopold and Williams, also from a comparison with the propositions of Mörcke and de Sinéty, are as follows: 1. The superficial layers of the uterine mucous membrane are thrown off during menstruation, and, when examined, are found to consist of entire cells, broken-down cells, and detritus; and, in some cases, of shreds of mucus

similar to those which are found in membranous dysmenorrhœa. 2. The hæmorrhage of menstruation is the cause of this loss of substance. The parts which undergo fatty degeneration do so as a result of the hæmorrhage. 3. Small cells in abundance are found in the superficial and middle layers of the mucous membrane which remains, but the latter bears no resemblance to the decidua of pregnancy. In the deepest layers there is a cellular hyperplasia of the interglandular tissue, the object of which evidently is to effect a restoration of the lost tissue. 4. The superficial epithelium, which may have remained after the current of the menstrual blood has swept away the remainder, undergoes fatty degeneration.

INTERNAL DIVISION OF THE CERVIX UTERI FOR DYSMENORRHEA.—Dr. W. Macfie Campbell ("Liverpool Medico-Chir. Jour.," Jan., 1883) gives a brief account of three such operations. In the first case, in addition to the dysmenorrhœa, were vaginitis, dyspareunia, and sterility, the cervix being conical and affected with catarrhal inflammation. The cervix was divided bilaterally. In two months the patient reported that she was perfectly well, and that her periods were painless. In the second case the dysmenorrhœa was of an aggravated character, and was also associated with sterility. The succeeding period was painless, but exposure to wet at the following period brought a recurrence of the pain. The operation in the third case, or possibly the use of the uterine sten (which was also used in the two other cases), caused peritonitis, not of a severe type, however. No relief to dysmenorrhœa followed. Only the first case, then, was successfully treated by this operation, from which the author concludes that this one alone of the three was mechanical dysmenorrhœa, and required the operation. His preference in future for the treatment of this disease will be gradual dilatation.

THE VOMITING OF PREGNANCY.—Horwitz ("Ztschr. f. Geb. u. Gyn.," ix, 1) objects to the unrestricted use of the phrase *uncontrollable vomiting* in all cases of pregnancy in which vomiting occurs. The phrase of Guéniot, *pernicious vomiting* in pregnant women (*vomitibus gravidarum perniciosus*), is more appropriate and more precise. The following propositions are advanced: 1. The uncontrollable vomiting of pregnancy usually begins between the tenth and eleventh weeks. 2. There are, generally, premonitory symptoms. 3. Nausea and other disturbances of the digestive apparatus constitute such premonitory symptoms. 4. Nausea often begins in the third or fourth week of pregnancy. 5. The duration of the vomiting is, as a rule, inversely as that of the nausea; the longer the latter, the shorter the former. 6. The more unbearable the nausea, the shorter the duration of the period of vomiting. 7. Ordinarily, the vomiting which occurs in pregnancy is painless, and unlike that which characterizes gastritis. The clinical symptoms pertain (1) to the period in which the phenomena are beginning to develop, but are not yet pronounced; (2) to the period in which they are established and threatening. Other marked symptoms, in addition to the vomiting, are loss of appetite, and even repugnance to food, salivation, and hyperosmia. The latter is a curious symptom, the patient being excessively sensitive to odors, real or imaginary, about her own person, and at other times to odors in her surroundings. This seems to be one of the causes of nausea; it disappears when the vomiting period supervenes. Obstinate and uncontrollable vomiting during pregnancy is most common in France, less common in England, and rare in Germany. Those who have suffered from uterine disease are most likely to be the subjects of uncontrollable vomiting when in the pregnant state. The author can suggest no more plausible theory of causation than the reflex irritation theory. As to prognosis, that will depend upon the duration of the mischief, and the epoch of pregnancy in which it appeared. It is bad

according as the vomiting begins near the beginning of pregnancy. Joulin gives the mortality in this disease—that is, in the obstinate form—as forty-four per cent. In regard to treatment, scarcely any new suggestions are made. Artificial abortion becomes a necessity when other means have failed. Transfusion of blood, in almost any supposable case, is not to be considered.

A NEW REMEDY FOR THE VOMITING OF PREGNANCY.—Dr. T. C. Wallace ("Med. and Surg. Reporter," Feb. 17, 1883) reports the use of a substance for the treatment of this condition which is new to materia medica. It is ordinary *popped-corn*, salted to taste. Lest a smile of incredulity should appear, the author states that he has had four years of experience with it, and has "always found it a beneficial, and generally a sufficient remedy." A case is narrated in which every conceivable remedy for this condition had been tried without success, but was happily relieved by the use of popped-corn.

OCCIPITO-POSTERIOR POSITIONS.—Charles R. Thompson, M. R. C. S. ("Brit. Med. Jour.," July 7, 1883), contributes the following useful hints with reference to this undesirable form of presentation. He first calls attention to the mechanism of labor in such cases, the forehead being pressed against the pubic arch, and the tendency of the *vis a tergo* being to force forehead and face forward, rather than to force the occiput onward, and cause it to sweep along the hollow of the sacrum. This condition is apt to obtain, unless rotation should occur, and cause the forehead to occupy the hollow of the sacrum. To remedy the faulty position, the occiput should be pulled down, which will be accompanied by recession of the forehead, and progress will result. The author has found that the whalebone fillet offers the best means for accomplishing this end, his plan of operation, after ascertaining the exact location of the head, being to pass the index and middle fingers of the left hand into the vagina until they reach the posterior fontanelle, and, if possible, are pressed against the occipital bone. The fillet is then passed along the left palm and fingers until it reaches the head, in a compressed condition. It is then allowed to expand, and caused to embrace the occiput. Traction is then made during the pains, the fingers of the left hand remaining in the vagina to guide the head in its progress. Rotation may then occur spontaneously, or, if not, labor pains will be excited by the pressure of the occiput against the posterior vaginal wall, and the labor will probably be soon terminated. Six cases are narrated in which the author adopted this method with desirable results.

A SPINA BIFIDA PRESENTATION is reported by Charles Penruddock, M. R. C. S. E. ("Brit. Med. Jour.," May 12, 1883), the child being the patient's fourth. No abnormality had attended previous confinements. Examination naturally suggested a face presentation, the orbits, nose, and mouth being successively, as was supposed, identified. The hand and hip being next discovered, the conclusion was reached that the lumbar region was presenting. Turning was decided upon and effected. A dead female child was delivered with a hydrocephalic head, and a large spina bifida in the middle of the lumbar region. The mother made a good recovery.

THE USE OF ANÆSTHETICS DURING LABOR.—Dr. Thomas D. Savill ("Brit. Med. Jour.," May 12, 1883) recently read a paper with the foregoing title before one of the London societies. His first point in favor of anæsthetics was that they relieve pain and thus prevent the loss of vital force at a very important period of time. Their relaxing power, too, not only overcomes rigidity of the tissues, but tends to obviate convulsions. The chief objections to their use in normal labor are, that they are liable to weaken the uterine contractions, and may induce post-partum hæmorrhage. Their value in abnormal labor is beyond estimation, especially in those cases in which operative procedure is required. As to the choice of anæsthetics, the author favors

chloroform, in almost all cases, to be used until partial or complete unconsciousness, according to circumstances, is reached. The reasons for its use and the cautions to be observed are those which are generally recognized as suitable. His advice to give a full dose of ergot in warm water, when the head reaches the perinæum, will not be accepted by every one as good doctrine.

THE TREATMENT OF POST-PARTUM HÆMORRHAGE.—Dr. Percy Boulton ("Med. Times and Gaz.," May 5, 1883) presented a paper with the foregoing title to the Harveian Society, March 1, 1883. He considered that true post-partum hæmorrhage was largely preventable, especially in those cases in which it so often occurs, in which parturition is allowed to drag on for hours and days after it should have been terminated, and in which uterine inertia has supervened. For the treatment of the accident when one is confronted by it, the author recommends the same useful means which are recognized the world over. As to the use of the liquor ferri perchloridi in those cases in which it is required, he thinks it is better to inject it with a syringe rather than to apply it upon a sponge, or in any other uncertain manner. Auto-transfusion is the term which he gives to the combined act of raising the foot of the bed and bandaging the extremities. His apparatus for transfusion is rather unique, and consists of a piece of rubber tubing of suitable length and lumen, in either end of which is fitted a glass cannula, and at a short distance from the latter a spring clamp. This he uses for direct transfusion, after properly displacing the air in the tube with a saline solution.

INVERSION OF THE UTERUS FOLLOWED BY SPONTANEOUS AMPUTATION.—Dr. R. Milne Murray ("Edinburgh Med. Jour.," April, 1883) reported this case to the Edinburgh Obstetrical Society, the facts having been stated to him by the gentleman in whose practice the case occurred. The patient was forty years of age, and this was her seventh pregnancy. All previous ones had been normal, and there was no fault, so far as could be ascertained, in the pelvic organs. The labor, in this instance, was normally ended, and the placenta was expelled spontaneously. Twenty-four hours later the uterus was found to be inverted. It was replaced without difficulty, but was again found to be inverted on the following day. All efforts to keep it in position were unavailing, and on the fourth day constitutional disturbance was noticed. This gradually became worse in spite of all possible attentions. On the thirteenth night, post partum, the uterus sloughed off, without hæmorrhage. A long and severe illness followed, but the patient eventually recovered.

OBSERVATIONS ON THE BLADDER DURING THE EARLY PUERPERIUM.—Dr. J. Halliday Croom ("Edinburgh Med. Jour.," April, 1883) read an article from this text before the Edinburgh Obstetrical Society, January 10, 1883. He observed that immediately after the third stage of labor, and during the early puerperium, the bladder exerts an important influence on the uterus, especially as regards its position. The latter organ lies lower in the pelvis immediately after labor than it does a few hours later. It is usually in a central position, though it may be deflected to either side. It offers no obstacle to the distension of the bladder, hence the latter may easily be felt at this period, when distended, through the anterior vaginal wall. The effect of this distension is to displace the uterus upward more by a straightening of the organ, however, than by any actual forcing of it upward, the supposition being that it had sagged forward, as well as descended, after parturition. The mesial position of the uterus which is found in so large a number of cases presupposes a dorsal decubitus on the part of the patient, as well as an empty condition of the bladder and rectum; deflection occurs when these conditions are not present, and deflection to the right is more common than to the left. The greater the quantity of urine in the bladder, the greater the deflection, as a rule.

It is also to be borne in mind that the female bladder distends asymmetrically. As a summary in respect to right and left deflections of the uterus, the former is due: to a previously existing right lateral deviation of that organ during pregnancy, to a distended rectum, to the accident of position. The latter is due to the filling of the bladder, which, on account of asymmetry, expands more to the right side, or to the left lateral decubitus of the individual. These changes are most noticeable in the early days of the puerperium, for, as this advances, the uterus becomes smaller and firmer, and so less susceptible to the action of such a force as is exerted by the distending bladder.

(To be concluded.)

Miscellany.

THERAPEUTICAL NOTES.—*Spiritus Ætheris Nitrosi*.—Dr. D. J. Leele, professor of materia medica and therapeutics in Victoria University, in a recent paper ("Practitioner," October, 1883), expresses the opinion that the very general lack of confidence in the efficacy of *spiritus ætheris nitrosi* arises from ignorance of the physiological and therapeutic action of this drug. His experiments have convinced him that its effects are more distinct and less transient than they are generally supposed to be. Its properties depend on the nitrous ether (nitrite of ethyl) it contains (from three to four per cent. when pure). The action of nitrite of ethyl is analogous to that of nitrite of amyl, of nitro-glycerin, and of the nitrites of the alkaline metals, "but, contrary to what might have been expected, the influence of the drug upon the circulation, in moderate doses, is of considerable duration." One hundred minims of *spiritus ætheris nitrosi* speedily produced, in a healthy subject, a marked fall in arterial tension lasting two or three hours. Doses of twenty-five or fifty minims produced a similar effect, though less marked and less enduring. The fall in tension was always accompanied by increased frequency of the heart-beat. The percussion-wave in the sphygmographic tracing was heightened. Experiment proved that the action of the sweet spirit of niter could not be attributed to the rectified spirit it contained in large proportion. There was generally a notable absence of subjective symptoms, even when the fall in arterial tension was very considerable. However, large doses may cause slight throbbing, giddiness, faintness, or depression. The acceleration of the pulse is not so great as that produced by nitrite of amyl or by nitro-glycerin; small doses do not usually increase the frequency of the pulse-rate very much.

The therapeutic rôle of *spiritus ætheris nitrosi* is mainly due to its influence on the circulation. It reduces arterial tension, in part, at least, by its power of dilating the arterioles in certain areas. Thus, probably, it acts as a diuretic. "It seems probable that any agent which increases the rapidity of the blood-flow through the Malpighian glomeruli is capable of increasing the secretion of water, and that both those agents which increase arterial tension and those which decrease it may, under different conditions of the circulation, in this way produce diuresis. Sweet spirit of niter will probably not act as a diuretic unless decrease of tension is necessary for diuresis. This view accounts for the frequency with which it disappoints the practitioner who employs it to increase the flow of urine. In cardiac dropsy, for instance, the indications for *spiritus ætheris nitrosi* will rarely be present, and it is in this affection that its failure as a diuretic has been specially noted. On the other hand, it usually acts satisfactorily in elderly people in whom tissue degeneration has produced increased arterial tension. The short diuretic effect of sweet spirit of niter, even when it causes increased urinary secretion, as compared with the effect of digitalis, is explained by its comparatively short influence on the circulation. The diaphoretic action of nitrous ether, like its diuretic action, is due to its effect on the circulation. The reason the dilatation of the cutaneous vessels to which it gives rise is not always followed by perspiration is that such dilatation is but one factor in the causation of diaphoresis.

It is clear that it may cause a tense, small pulse to become not only quicker, but also fuller and stronger to the feel. Moreover, the heart's action under its influence may become perceptible to the patient. These facts account for the stimulant action which it has been supposed to exert on the heart. The febrifuge properties for which it is often given are due, partially at least, to the dilatation of the cutaneous vessels it produces, and to the consequent exposure of a larger amount of blood to the air. However, they may be due also, in part, to some direct influence of the drug on the tissues; for Wood has noticed that the fall in temperature which in animals follows the administration of nitrite of amyl is accompanied by diminished excretion of carbon dioxide.

Nitrite of ethyl, the essential constituent of sweet spirit of niter, has been found effectual in averting attacks of angina pectoris. And, while *spiritus ætheris nitrosi* will probably never take the place of nitrite of amyl or nitro-glycerin throughout the whole spheres of their actions, yet it will doubtless prove beneficial in many conditions in which relief is afforded by the latter agents. "May it not be that our failures with it have arisen partly from the use of an impure spirit, partly from the want of knowledge as to the physiological effects on which its therapeutic uses depend; and that the use of the genuine drug in proper cases, may show us that the popular belief in the efficacy of sweet spirit of niter is founded on fact?"

An Acid Solution of the Hypophosphites.—Dr. George S. Gerhard, of Ardmore, Pa., recommends ("Philadelphia Medical Times," November 3, 1883) an acid solution of the hypophosphites, which has been successfully prepared by his pharmacist at his suggestion. The salts are dissolved in water acidulated with hyposulphurous acid. In the sirups precipitation is prevented by the sugar. "The addition of a definite amount of hyposulphurous acid prevents the precipitation of at least two of the salts (those of iron and manganese)." The solution recommended is clear, slightly fluorescent, and pleasantly acid. It exerts a decided tonic and stimulant action. It increases the desire for food, and agrees with the most sensitive stomach, while the sirups, from their excessive sweetness, not only decrease the appetite, but often impair digestion. The formula for the solution is as follows:

Calcii hypophosphit.	
Potassii "	
Sodii "	āā gr. j
Quininæ "	
Mangani "	āā gr. ¼
Ferri "	gr. ½
Strychninæ "	gr. 1½
Glycerini	ʒ ij
Liq. acidi. hyposulph.	ʒ ij
Aq.	ad. f. 3 j

THE LATE SURGEON-GENERAL CRANE.—The following circular has been issued from the Surgeon-General's office:

WAR DEPARTMENT,
SURGEON-GENERAL'S OFFICE,
Washington, D. C., October 24, 1883.

With profound sorrow, the death of Brigadier-General Charles Henry Crane, Surgeon-General United States Army, which occurred at his residence in Washington, D. C., October 10, 1883, is announced to the officers of the Medical Department of the Army.

General Crane, son of the late Colonel I. B. Crane, 1st United States Artillery, was born at Newport, R. I., July 19, 1825, and received his early education at Maple Grove Academy, Middletown, Conn. He entered Yale College in 1840, graduating in 1844, with the degree of Bachelor of Arts. The degree of Master of Arts was conferred upon him by the same institution in 1847.

He graduated in medicine at the Medical Department of Harvard University in August, 1847.

Having been approved by an Army Medical Examining Board, December 11, 1847, as a candidate for the position of Assistant Surgeon, United States Army, he was immediately placed under contract as an Acting Assistant Surgeon, and accompanied a detachment of troops to Mexico, arriving at "Camp Washington," near Vera Cruz, February 20, 1848. He was commissioned Assistant Surgeon, United States Army, February 14, 1848. From February 20 to July, 1848, he served with the "Army of Invasion" in Mexico.

On returning from Mexico, early in August, 1848, he reported for duty at Fort Columbus, New York Harbor, and was assigned to duty with the 2d United States Artillery. October 8, 1848, he accompanied two companies of the 2d United States Artillery to Fort Monroe, Va. He was then ordered to Florida with troops, arriving at Fort Pickens, Pensacola, Fla., November 16, 1848. From this date until August 10, 1851, he served at Key West Barracks, St. Joseph's Island, Forts Pickens, Brooke, Fraser, Casey, and Myers, and with expeditionary forces in the field. On being relieved from duty in Florida, and at the termination of a leave of absence, he reported for duty December 18, 1851, and on January 13, 1852, sailed from New York in the steamer Falcon, with recruits for California. He arrived at Benicia, Cal., February, 28, 1852, and was assigned to temporary duty at Benicia Barracks. From June 16 until September 1, 1852, he was engaged in field service against hostile Indians near Merced River, Cal. From September 23 until November 10, 1852, he was again in the field with an expedition in the Sacramento Valley, Cal. November 10, 1852, he arrived at Fort Jones, Cal., where he remained on duty until July 15, 1853.

From October 31, 1853, until March, 1856, he was on duty at Fort Lane, Oregon. During these years he was actively engaged in post duty and with military expeditions against Indians, prominent among which was that against the Rogue River Indians in 1856, where he rendered distinguished service.

On August 7, 1856, he was ordered to Fort Yamhill, Oregon, where he served until relieved from duty on the Pacific Coast in December, 1856.

Reporting for duty in New York, he served for a short time with the Medical Purveyor, United States Army. From May 1, 1857, until September 20, 1859, he was one of the members of an Army Medical Examining Board convened to meet in New York City. Being relieved from this duty, he remained in New York, acting at times as Medical Purveyor.

September 20, 1859, General Crane accompanied Lieutenant-General Scott to San Juan Island, on his diplomatic visit, returning to New York December 12, 1859, and continuing on duty as Attending Surgeon at Headquarters of the Army, and on special duty until February 28, 1862.

He was promoted Major and Surgeon May 21, 1861.

On February 23, 1862, he was assigned to duty as Medical Director, Department of Key West, Fla. On June 30, 1862, he was transferred to Hilton Head, S. C., and assigned to duty as Medical Director, Department of the South. July 31 to August, 1863, he is reported as awaiting orders at Washington, D. C., and on duty connected with Prisoners of War.

September, 1863, he was placed on duty in the Surgeon-General's Office, Washington, D. C. July 28, 1866, he was appointed Assistant Surgeon-General, U. S. Army, with the rank of Colonel, and, upon the retirement of General Barnes, was appointed Surgeon-General, July 3, 1882.

March 13, 1865, General Crane received the brevets of Lieutenant-Colonel, Colonel, and Brigadier-General, for faithful and meritorious services during the War of the Rebellion.

In the death of Surgeon-General Crane the Medical Department of the Army sustains a serious loss. Still in the vigor of life, and with a reasonable prospect of several years of active service in the position to which he had been but recently promoted, it has pleased an inscrutable wisdom to remove him from our midst.

His record, honorable and spotless, lives after him; a source of pride and satisfaction to his friends, a model worthy of imitation by all.

The larger portion of his official life was engaged in administrative duty, for which he had always manifested a peculiar fitness.

Selected to assist in the arduous and important duties devolving upon this office during the latter years of the War of the Rebellion, his sound judgment, delicate sense of justice and right, deliberate action, and firm decision, soon won for him an enviable reputation, and materially assisted in raising the Medical Corps of the Army to the high degree of discipline and efficiency which has characterized it in the past and present.

In the literary and scientific work of the office he manifested untir-

ing interest; to his watchful care, encouragement, and aid, are largely due the successful progress and completion of undertakings which have gained for the Medical Corps the admiring recognition of the world.

Thoroughly acquainted by early experience with the requirements of his department, assiduously attentive to the routine of business, even in its details, punctilious in regard to the rights of all, and earnest in his endeavors to promote harmony and a healthy *esprit de corps*, General Crane labored patiently, faithfully, and effectively for the best interests of his charge.

In his private life he was conspicuous for his firm, devoted friendships; for his kindly interest in, and sympathy with, the joys and griefs of those about him; for his habitual attention to the courtesies which adorn life. Unselfish and generous to a fault, his many deeds of kindness and charity were done quietly and without ostentation.

He needs no higher tribute to his worth as a man than the widespread sorrow which his loss has occasioned, and the respect for his memory which will long be cherished by all who knew him.

General Crane, at the time of his death, was one of the Commissioners of the Soldiers' Home, a Visitor to the Government Hospital for the Insane, and to the Columbia Hospital for Women.

After appropriate funeral services at his late residence in this city, on October 11, 1883, his remains were removed to Shelter Island, N. Y., for interment.

D. L. HUNTINGTON,
Acting Surgeon-General, U. S. Army.

THE COLUMBIA VETERINARY COLLEGE.—We would call attention to a course of lectures on subjects of general interest now in progress at the Columbia Veterinary College and School of Comparative Medicine, 215 and 217 East Thirty-sixth Street, every Monday evening, at 8 o'clock. The lectures still to be given are as follows: *November 19th*, "Domestic Animals," by Professor A. S. Heath; *November 26th*, "Comparative Zoology," by Professor H. W. Mitchell; *December 3d*, "The History of Surgery," by Dr. William T. Bull; *December 10th*, "Sanitary Suggestions for the Farmer," by Dr. C. R. Agnew; *December 17th*, "The Milk Supply of New York City," by Mr. Henry Bergh. We understand that an additional course is to be given after the holidays.

THE PRONE POSITION FOR THE ADMINISTRATION OF ANÆSTHETICS.—It is well known that an erect position of the patient adds materially to the dangers attending the administration of chloroform, ether, etc., but it has been thought a necessity in dental practice. Ordinary operating chairs are not intended for a recumbent attitude, and very few of the practicing dentists who use anæsthetics largely are provided with any other convenience. Yet any one is criminally negligent who does not secure every safeguard against danger in such a grave matter as the administration of an anæsthetic.

The erect position is not only dangerous because of obstructions to the free flow of the blood column, but it adds the peril of the lodgment of foreign bodies in the trachea. In the extraction of teeth they are apt, in the hurry of the operation, to slip from the forceps, and are liable to drop into the pharynx, whence their dislodgment is sometimes difficult. Pieces of broken teeth, mouth props, and clots of blood occasionally are sources of danger, and instances are on record where they have caused the death of the patient. If this attitude was an absolute necessity there would be a better excuse in case of such an accident. But we have found that a prone position offers many advantages for the performance of oral surgery, while it simplifies the administration of the anæsthetic.

An operating table is easily prepared by taking the frame-work of an ordinary narrow cot-bedstead and stretching the canvas tightly over it. A canvas pillow should be provided for use during the administration of the agent, and straps to hold the arms and body are easily attached beneath it, for use if the patient becomes violent. They need not be in sight, or be brought into use unless a necessity for their employment arises. Such a table should be placed before a window in an unused room, or it may even be set in the laboratory. When a patient is to be anæsthetized, place him or her upon it and proceed with the administration. When this is accomplished, remove the pillow and perform the operation. If teeth are to be extracted, the head should be turned to one side or the other, as convenience demands, so that the

blood and any extracted teeth or broken pieces will fall to the corner of the mouth, whence they are easily removed. If right inferior teeth are to be removed, and the operator is standing upon the right side of the patient, let him quickly turn the head from him until it rests upon the left cheek; then, bending across the body, the teeth are presented in a very favorable position for removal. If the left superior jaw is to be operated upon, the position of the head of the patient should be reversed. For inferior teeth upon the left side, a convenient position for the operator is at the head of the patient, who is lying upon the left side. In such position the blood flows easily and readily from the mouth, and the strangling and choking so common in patients in a sitting posture will not be observed.

We have used this position for some time, but our attention has been again called to its advisability by the perusal of a pamphlet by Professor Tiffany, of the University of Maryland, who recommends it in cases of tracheotomy and the removal of pharyngeal tumors. In the removal of considerable portions of the upper jaw it has sometimes been found necessary to perform tracheotomy on account of the accumulation of blood, but by the use of the prone position this will be unnecessary, as the blood readily flows from the mouth. Professor Tiffany recommends that the head should be slightly raised. We have found that it is better to allow the head to be in a line with, or even sometimes a little lower than the body, the removal of the blood being effected by turning the head to one side or the other. In operations in dental surgery, performed in this manner, we have never known the blood to cause any embarrassment whatever.—*Independent Practitioner*.

DISLOCATION OF THE SEMILUNAR CARTILAGE OF THE KNEE JOINT.—Although this injury is described in all surgical text-books, we yet believe it is one that is not unfrequently overlooked, especially on its first occurrence. A gentleman falls down, and is picked up complaining of severe pain in the knee, with partial or complete immobility of the joint, which speedily becomes swollen. There is great likelihood that in these circumstances the diagnosis of "severe sprain" will be made, and the real condition remain unnoticed. The failure to replace the dislocated cartilage at the time not only entails much suffering and interference with the function of the joint, but it very greatly lessens the probability of a complete recovery ever being accomplished. The cartilage may be reduced, but it fails to become firmly fixed in its place, and ever afterward there is a liability for it to slip out again during the free movements of the joint. When this happens, acute pain, possibly a fall as well, and temporary lameness are occasioned. There is therefore every reason why the surgeon should endeavor to recognize this particular injury on its first occurrence, and having recognized it to treat it properly. The accident happens during some sudden wrench to the joint, not necessarily severe; immediately severe sickening pain arises, and the limb is fixed in the flexed position, although passive movement is possible. Synovitis quickly ensues. If the cartilage is displaced from between the bones, or marginally, it forms a projection just over the interval, between the femur and tibia; but in some instances it is dislocated inward, so as to lie between the two condyles of the femur, and then is quite beyond reach. In such cases the diagnosis must rest alone upon the cause of the accident—some wrench or sudden movement—the acute pain, and the fixity of the joint in the flexed position. The symptoms are more severe than those caused by a simple sprain of the joint from such an amount of violence, while, on the other hand, the slipping of a loose cartilage between the bones causes still more acute suffering, and the body itself can be felt at times. The first thing to do is to replace the cartilage by extreme extension immediately following upon full flexion of the joint. In some cases the cartilage slips into place with a distinct snap, and in all cases the power of movement is at once restored. It is then important for the patient to wear a firm support to the knee for some months, which shall render impossible such a wrench of the joint as shall displace the cartilage, and if this is persevered in the cartilage again becomes adherent to the tibia. It is believed that the internal meniscus is more frequently displaced than the outer.—*Lancet*.

USE OF THE RECTAL LEVER.—On October 9, 1883, Mr. Cowell amputated through the left hip-joint of a man, in the Westminster Hospital, for old-standing disease of that articulation. Mr. Richard Davy con-

trolled the common iliac artery with his lever; four ounces of blood were lost. The man is progressing favorably. On October 10, 1883, Mr. Turner tied the right gluteal artery at the Seamen's Hospital, Greenwich. Mr. W. Johnson Smith has communicated the following note on the case: "Mr. Turner's patient was the subject of a very extensive traumatic aneurysm of the gluteal artery, which vessel it was thought necessary to expose by dissection so as to tie it above and below the opening. As the patient was old, and had been much weakened by hæmorrhage, it was very necessary to do all this without causing much further loss of blood; and as the abdominal compressor is an uncertain instrument, and likely, by itself, to cause shock, the operation on this patient would have been difficult, if not impossible, without the use of Davy's lever. This was applied, by the house surgeon, with thorough success. We saw the opening in the artery, and the double ligature was applied in an almost bloodless wound, and, beyond the blood already extravasated into the sac of the aneurysm, there was not a further loss than of, at the most, half an ounce."—*British Med. Jour.*

ARMY INTELLIGENCE.—*Official List of Changes of Officers serving in the Medical Department of the United States Army from November 3, 1883, to November 10, 1883.*—BAENE, DALLAS, Major and Surgeon. Par. 1, S. O. 233, A. G. O., October 18, 1883, assigning him to duty at Willet's Point, New York, revoked. Par. 2, S. O. 252, A. G. O., November 3, 1883. — STERNBERG, GEORGE M., Major and Surgeon. Leave of absence granted October 4, 1883, extended one month. Par. 4, S. O. 255, A. G. O., November 7, 1883. — VICKERY, R. S., Major and Surgeon. Assigned to duty at Fort Townsend, W. T. Par. 3, S. O. 149, Department of the Columbia, October 29, 1883. — WOLVERTON, WILLIAM D., Major and Surgeon. Granted leave of absence for one month. Par. 6, S. O. 201, Department of the East, October 24, 1883. — MERRILL, J. C., Captain and Assistant Surgeon. Granted leave of absence for one month. Par. 7, S. O. 201, Department of the East, October 24, 1883. — PATZKI, J. H., Captain and Assistant Surgeon. Granted leave of absence for three months, on surgeon's certificate of disability. Par. 6, S. O. 254, A. G. O., November 6, 1883. — OWEN, W. O., First Lieutenant and Assistant Surgeon. Relieved from duty at Vancouver Barracks, W. T., and assigned to duty at Fort Stevens, Oregon. Par. 2, S. O. 148, Department of the Columbia, October 26, 1883. — WILSON, GEORGE F., First Lieutenant and Assistant Surgeon. Assigned to temporary duty at Fort Townsend, W. T. Par. 2, S. O. 149, Department of the Columbia, October 29, 1883.

NAVAL INTELLIGENCE.—*Official List of Changes in the Medical Corps of the Navy during the week ending November 3, 1883.*—The orders of MEDICAL INSPECTOR A. C. GORGAS to the Naval Hospital, Mare Island, Cal., revoked, and to remain at Naval Hospital, Chelsea, Mass. — MEDICAL INSPECTOR SOMERSET ROBINSON ordered to the Naval Hospital, Mare Island, Cal. — SURGEON F. M. DEARBORNE to appear before the Retiring Board November 5th. — MEDICAL DIRECTOR A. L. GIBSON and MEDICAL INSPECTOR A. HUDSON to represent the navy at the meeting of the American Public Health Association at Detroit, Mich., November 13th. — ASSISTANT SURGEON J. M. EDGAR ordered from the receiving-ship St. Louis at League Island, Pa., to the receiving-ship Wabash, at Boston, Mass. — PASSED ASSISTANT SURGEON A. A. AUSTIN ordered to the receiving-ship St. Louis at League Island, Pa.

SOCIETY MEETINGS FOR THE COMING WEEK.—*Monday, November 19th:* Roman Medical Society (private); Medico-Chirurgical Society of German Physicians (private). *Tuesday, November 20th:* New York Obstetrical Society (private); New York Academy of Medicine (Section in Theory and Practice); Medical Association of Central New York (Rochester); Medical Society of the County of Kings, N. Y.; Ogdensburg (N. Y.) Medical Association. *Wednesday, November 21st:* New Jersey Academy of Medicine (Newark). *Thursday, November 22d:* New York Academy of Medicine (Section in Obstetrics); Brooklyn Pathological Society; Harlem Medical Association (private). *Friday, November 23d:* New York Clinical Society (private); New York Society of German Physicians (private); Yorkville Medical Association (private). *Saturday, November 24th:* New York Medical and Surgical Society (private).

Lectures and Addresses.

A CLINICAL LECTURE IN
GYNÆCOLOGY,

DELIVERED AT THE HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA,

BY WILLIAM GOODELL, M. D.,
PROFESSOR OF GYNÆCOLOGY.

Hæmorrhage after the Operation for Laceration of the Cervix Uteri.—Remarks on the Use of Pessaries.—Vaginal Injections.—Amenorrhœa as a Result of Metrorrhagia.

GENTLEMEN: Owing to the cold weather, but few patients have presented themselves at our clinic to-day. I shall, therefore, be unable to show you any operations, but, on the other hand, I shall bring before you a few cases and make some practical remarks on them, which may, perhaps, be of more value to you.

Our first patient is a young woman upon whom I operated some time ago for laceration of the cervix. The laceration was bilateral, on one side reaching down to the vaginal junction. Let me say here that when you come to denude a laceration which extends to the vaginal junction, you are likely to cut the circumflex artery and get a pretty free hæmorrhage. What is to be done under such circumstances? The tissue is erectile, and so firm that the vessel can not readily be ligated; and, indeed, it would not do to tie the vessel, because the ligature would interfere with union. As soon as the hæmorrhage occurs, take a sponge and firmly press it on the bleeding part. Then with a needle pass a stitch down deep below the vessel. Traction on the ends of the wire will usually control the bleeding; but, if it does not, the stitch must be drawn firmly, and secured by slipping a shot down and clamping it. When the other stitches are introduced, it is well to pass another wire so as to include the vessel. I have had secondary hæmorrhage but twice after this operation. In one of the cases the womb was adherent and held high up by inflammatory adhesions, which rendered the operation quite difficult. In this instance the bleeding was readily controlled by the injection of a hot solution of alum. The second case occurred about a month ago. On the second day after the operation a severe hæmorrhage set in. I was sent for by the nurse, and found the patient had lost and was losing a great deal of blood. I at once proceeded to plug the vagina, but I did not tampon the vagina in the ordinary way, for, as the laceration was bilateral with a posterior and anterior lip, were a sponge pushed directly against the cervix it might spread apart the lips, or a clot might form behind the sponge and gradually separate the lips, thus making the operation a failure. In order to avoid these accidents, I took two sponges, and, after dipping them in vinegar, passed one into the posterior cul-de-sac of the vagina, and the other into the anterior cul-de-sac, thus pressing the lips of the cervix together. The vinegar was used not for its hæmostatic effect, for this would, under the circumstances, be very

slight, but because it is a good deodorant, and was the only one available at the time. Over the sponges I introduced one of my patient's handkerchiefs, packing it in little by little, and leaving an end, or tail, protruding, in order to facilitate its removal. By the way, an ordinary roller-bandage, when unrolled, makes an excellent tampon. It may be firmly packed into the vagina and one end left projecting from the vulva. By drawing on this tail, the tampon is readily removed. At the end of twenty-four hours I removed the handkerchief, and in forty-eight hours, as there was no bleeding, I removed the sponges. No more hæmorrhage took place, and the union was perfect.

In the patient now before you there was, as the result of the operation, a slight cellulitis and perhaps a little peritonitis. It was not sufficient to cause any marked elevation of temperature, but rendered the womb somewhat tender. After the operation I had to contend with a badly retroflexed and retroverted womb, which was exceedingly tender. The difficulty was to keep this tender womb in its proper position by the use of a pessary. If in such a case you introduce a hard pessary, it causes so much pain that it has to be removed, and the woman is so thoroughly demoralized that you will find it a difficult matter to get her to wear another. The proper plan is first to obtund the sensitiveness of the womb and vagina. This may be done in a variety of ways. If the vagina is of sufficient size to admit a pessary long enough to span the angle of flexure and to keep the womb up, your course is clear. The patient should be put to bed, vaginal suppositories, containing sulphate of morphine and extract of belladonna should be used, and large quantities of hot water should be injected. The mistake that is usually made in the use of hot-water injections is that too small a quantity is employed. A quart of water will do more harm than good. As I sometimes illustrate it: If you were going to a party and wished to get on a pair of tight kid gloves, you would not wash your hands in hot water, for that would make them swell. But should you dabble them in hot water for fifteen minutes, they would shrivel up like a washerwoman's hands, and you could, with a little trouble, get on the gloves. So, if you inject a small quantity of water into the vagina, blood is invited to the part and there is an increased congestion. If, however, a large amount be injected, the secondary effect of the hot water is obtained. It then causes contraction of all the tissues and the capillaries, thus lessening the amount of blood in the womb. The quantity used each time should not be less than one or two gallons. It is far better to inject the water from a syringe than to use the douche, for when it is projected forcibly it makes a more marked impression. No woman can herself use a syringe for fifteen or twenty minutes in the position which it is necessary that she should maintain. It must be done by an assistant; but, if she can not afford a nurse, as unfortunately happens too often in those cases that come to the hospital, she will have to use the douche. This is called a fountain reservoir. It consists of a tin pail holding two or three gallons, with a cock on one side, to which is attached a rubber tube, at the extremity of which there is a nozzle. This

nozzle should not be made of metal, for, as the water has to be at a temperature of from 110° to 120° , the heat is conducted by the metal to the sensitive vulva, giving rise to the sensation of being scorched. As you have been told before, I consider the nerves of the vulva to be more sensitive than those of any other portion of the body, not even excepting those of the eye. The nozzle should, therefore, be of rubber. It should have no terminal opening, but its sides should be perforated by a number of holes which will direct the water forward. A few words in regard to the administration of hot-water injections. There can now be bought in this city an arrangement which is called a douche-bath, and which greatly facilitates the administration of hot vaginal injections. This douche-pan is on the principle of the shovel bed-pan, but larger. There is a ledge on which the buttocks rest, and in front there is a little reservoir, from the side of which projects a nozzle. To this nozzle is attached a rubber tube, which carries the liquid, as fast as it flows from the vagina, into a vessel beneath the bed. Before this was introduced, I had the patient brought to the edge of the bed with her feet supported on chairs and her hips well elevated by a pillow. Over the pillow was placed a large rubber cloth, so arranged as to form a gutter, to carry the liquid into a vessel placed on the floor. In this way a large amount of water could be easily injected, but it was a cumbersome way, and I much prefer the douche-pan, which simplifies matters.

There is a word of caution to be given in this connection. Sometimes, as a result of laceration of the cervix or on account of other causes, the os may be so patulous as to admit the nozzle of the syringe, and, if, like the old-fashioned nozzles, it has a terminal orifice, the water will be projected directly into the cavity of the womb. The womb immediately resents the presence of the water and forcibly contracts; but, as the nozzle completely occludes the os, the water is forced through the Fallopian tubes into the peritoneal cavity, causing inflammation. I have seen a number of instances of uterine eclic from this cause, and every year there are reported cases in which death has followed the injection of simple water into the womb. I must acknowledge that I do not clearly see why this accident should be followed by such serious results. You should always examine the syringe before it is used, and, if there is a terminal opening, close it either by a little plug of wood, or by tapping around the hole with a small hammer.

The water may be medicated with various remedies. Laudanum will do much to obtund the sensitiveness. One or two ounces may be added to the water. I am not in the habit of using this, for the laudanum is so diluted that it does not make the same impression as a suppository, which will remain in the vagina for hours and be absorbed gradually. I have often seen patients go to sleep after the use of a morphine suppository in the vagina. In using belladonna, I never employ at first more than one grain of the extract, but, if necessary, gradually increase it to two grains. There is a great deal of idiosyncrasy in regard to belladonna. In some persons one eighth of a grain by the mouth will produce toxic symptoms. I have heard a clergyman, to whom I had given one half of a grain of the extract, talk the most

unmitigated nonsense for some hours, alarming his family and the whole neighborhood.

Ammonium chloride may with advantage be added to the water. If there is any offensive discharge, chlorate of potassium is of service. I, however, prefer the chloride of ammonium to any other remedy, adding one ounce of the salt to each injection.

Having by these means obtunded the sensibility, and if the vagina is long enough, you introduce a pessary which will raise the fundus of the womb. If you can relieve the dislocation, the tenderness will soon disappear. This tenderness is due to two conditions. In the first place, the womb is turned upside down; it is standing on its head, as it were; the blood-vessels then become enlarged and turgid, and, consequently, the womb is tender. In the second place, an ovary often descends with the womb as it turns over. If the womb be kept in its proper position for a few hours, this congestion lessens, and the longer the pessary remains the less tender the womb becomes. After two or three days the patient may be allowed to get out of bed.

When, however, you have to deal with a tender womb and a short vagina, all your skill in the adaptation of pessaries will be needed. I know of nothing more trying to patient and physician than the replacement of a retroverted womb in an unmarried girl with a short vagina. I have always succeeded, but it requires patience on both sides. The proper plan is to put the patient to bed, and obtund the sensibility by the use of hot water, medicated or not, and by suppositories. Having done this, put in a pessary as long as can be borne; in a few days put in a longer one, and so go on increasing their size until the vagina is sufficiently stretched to admit a pessary that will replace the womb.

A word in regard to the action of pessaries. We can easily understand why there should be a diversity of opinion on purely theoretical questions; but, when the question is one of sheer mechanical action, we should expect that all would think alike; such, however, is not the case in reference to the action of pessaries in posterior displacements. Some, and indeed the majority of authorities, contend that the way in which a pessary does good is not by pressing upon the fundus or the corpus, but by elongating the vagina, which draws the cervix upward and backward, and, as a consequence, tilts the fundus forward. I am willing to grant that this is the usual action of a pessary; but that it is not its only action I have had digital proof. Hence, I contend that the pessary sometimes undoubtedly impinges upon the body of the womb through the vagina, thus pushing it forward and straightening it. If this were not so, there would be no good derived from a Hodge pessary in retroflexion. But, as I have frequently told you, this pessary will straighten a retroflexed womb when it is long enough to span the angle of flexion. It then does not press on the fundus, but on the body of the womb beyond the bend. If it is not long enough, the womb will ride the pessary and straddle it, thereby increasing the flexion. Last week I had, as I just said, digital proof of this. I at that time performed oöphorectomy in a case in which perityphlitis had been followed by abscess. The resulting cellulitis had so im-

prisoned the right ovary that it could not move, and, consequently, great pain was caused whenever the cæcum and colon were loaded. Various methods of treatment were tried, but, all failing, I determined to extirpate the offending organ. I had previously found that the womb measured three inches and a half, and was very badly retroflexed. I had considerable difficulty in getting a pessary to suit. But I finally succeeded, by a very long one, in restoring the womb to its natural situation. After making the incision through the abdominal wall, it required three quarters of an hour to find the right ovary. It was finally discovered buried in adhesions. The left ovary was easily found, and, to be on the safe side, both were removed; for, if this is not done, the operation will often give no relief. After removing the ovaries, I passed my fingers down into Douglas's pouch, and plainly felt the pessary pushing up the body of the womb, above the angle of flexure. There were several slender bands of adhesion which had kept the uterus in its abnormal position, but these had gradually been lengthened out. After the operation I removed the pessary; but, in thinking the matter over, I said to myself, "There will undoubtedly be some inflammation following the removal of the ovaries, which will fasten the womb in the position that it may occupy at that time. If I return the pessary and keep the womb in its normal position, the inflammation will tend to prevent its future displacement." So, before the patient came to, I replaced the pessary, and everything has thus far done well.

To return to the patient before you. I at first introduced a large pessary, but the womb was so tender that she could not stand the pressure. I then tried a smaller one, but this was so small that it did no good. I next used one between the two. She has been kept in bed, and she tells me now that she has no pain. The vagina has not yet been elongated sufficiently, but it will be, for the pessary projects from the vulva. Passing the sound, I find that the uterus is in a state of sinistro-lateral flexion—i. e., flexion to the left. By pressing upon the end of the pessary, I am able to raise the fundus of the womb, but this gives her pain. We shall have to wait a little before introducing a larger pessary. In the mean time the injections of hot water and the use of the suppositories will be continued.

A few more words about injection of hot water. It is not a panacea for all the ailments of the womb. Although it is an excellent remedy in the majority of cases, not only of tenderness, but also of hypertrophy of the womb, you will often be disappointed in it. It diminishes the size of an enlarged womb by its secondary effect upon the capillaries and tissues. If, however, you think that you can reduce a womb that measures three inches and a half to the normal two and a half by the use of hot-water injections, you will be disappointed. It can, perhaps, be reduced to three inches; but to reduce it more would require means which are heroic and unwarrantable under the circumstances, especially when we bear in mind that even these heroic measures may not be successful. You should always say to a patient whose womb is too large: "I can not make your womb as small as it was originally. You will have some trouble, some backache and some bearing-down pains,

but I can make you much more comfortable until the change of life." You may also say: "If I can get you in a condition to become pregnant, there is a probability, although not a certainty, that the womb will grow smaller." Such a case will require, after confinement, remedies that will condense the womb—as ergot, strychnine, and quinine. Iron is not the thing. If given after confinement, it is very apt to do mischief. Iron has a tendency to cause a flow of blood to the womb. It will occasionally do great good, but more frequently it does harm. In those cases where a woman is weak and anæmic from uterine hæmorrhage, a tonic is required, and the best preparations are the vegetable tonics. A good combination is a teaspoonful of Huxham's tincture—the tinctura cinchonæ composita, with ten to fifteen drops of tinctura ignatiæ.

The next patient is a lady, twenty-nine years of age. She has been married nine years. She had a miscarriage eight years ago. She lost a great deal of blood at the time, and the bleeding continued for four months. When I heard this, I said to myself: "If the hæmorrhage continued so long, the miscarriage was probably induced;" but, on asking her if such was the case, she assured me that it was perfectly natural.

Why should there be bleeding after a criminal abortion and not after a natural one? This may be illustrated by fruit growing on a tree. When the fruit is mature, it drops off from a slight shake, and no injury is done either to the tree or to the fruit. But, if you pluck the fruit while it is immature, you will probably break the twig from which it grows. Again, and this illustration is a happier one, if the fruit is blighted from any cause, it will drop off readily without any injury to the tree. So, when a woman has a natural miscarriage, it is analogous to the falling off of the blighted fruit. The ovum is dislodged from its attachments, usually by the escape of blood behind it, and is thrown off as a whole—viz., the sac, with a little fœtus inside; no membranes are left behind, and no injury happens to the womb. But when, by criminal means, miscarriage is induced, it is like plucking the fruit while it still has sap-communication with the tree, and mischief results. The method most frequently employed to induce abortion is by puncturing the membranes. When this is done, the waters and embryo escape, but the adherent membranes remain behind. The secundines may remain after a natural abortion, but this is not the rule. In this woman the bleeding continued for four months, showing that the membranes remained attached to the womb, and acted like a polypus. This loss of blood was sufficient to produce a condition of anæmia. Menstruation then ceased. She has now partial amenorrhœa. She has been treated in the dispensary, and has been much benefited. Before coming to the hospital the menses were very irregular. This is the history that often follows serious hæmorrhage at confinement. There is a strange peculiarity connected with loss of blood. It is frequently observed that where a person is losing blood in dribblets she will grow fat. This fact is taken advantage of in æsthetic countries by butchers, who bleed the calves in order to have white and at the same time fat meat.

In the treatment of these cases we give iron in large

doses. We also give cinnamon, which causes a flow of blood to the womb. The uterus should be irritated by making applications to the fundus. The diet should be good, the digestive apparatus should be kept in order, and the bowels regulated. When the woman has grown fat from the loss of blood, it is not easy to restore the menses.

In a late number of the "Lancet" Dr. Ringer gives a series of cases in which he used, with excellent results, the permanganate of potassium. He gives it in one-grain doses three times a day, gradually increasing the dose to two grains three or four times a day. He considers it to be the best remedy there is for bringing back the menses. He states that it does good, not by improving the blood, but apparently by a specific action on the uterine tissue. I shall try this remedy in my next case of amenorrhœa. This woman is doing so well that I do not think it necessary to administer it to her.

I have often seen women from thirty to thirty-five years old begin to grow fat, and soon the menses would cease. These women are frequently excessively anxious to have children. There is nothing more difficult than to establish menstruation in such patients. I have tried all forms of treatment. I have used the galvanic stem pessary, in some instances with success, and in other instances with failure.

I explain this condition in the following manner: At the change of life there is atrophy of the reproductive apparatus, and especially of the ovaries. At that time women, as a rule, either grow stout or else they grow thin. Now, although I have no post-mortem results to offer in support of my opinion, I believe that in women of the age I mentioned, and who cease to menstruate, there is atrophy of the ovarian structures. Such a supposition readily explains the reason why it is so difficult to establish the flow in these women.

Original Communications.

THE STATUS OF THE MEDICAL PROFESSION IN THE STATE OF NEW YORK.

By HENRY G. PIFFARD, M.D.

Seventh and Concluding Article.

A FEW days before the meeting of the State society in February, 1883, a prominent homœopathic physician of this city said to the writer that, if the society stood by the new code, he, and probably other members, would resign from the homœopathic county society, and abandon their special designation; but that, if the State society re-enacted the American code, thus showing that the old spirit of intolerance still dominated the profession, he should not leave the homœopathic society, fearing, with others, that it would be still necessary for the protection of their interests to keep up a separate organization. As soon as it was known that

the old code had not been restored, and that the old-code party were in the minority, this gentleman and two other well-known homœopaths severed their connection with the homœopathic society. A month later, four others in like manner resigned and abandoned their sectarian titles. It seemed probable that this break from the homœopathic ranks would have greatly increased, and, in the writer's judgment, fully one half of the members of the homœopathic society would have abandoned sectarianism had it not been that the old-code party made renewed efforts for supremacy, and impressed many with the belief that they would ultimately succeed in restoring the old code. The bold front and the assurance of success assumed by the advocates of the American code put an immediate stop to resignations from the homœopathic organizations and delayed their disintegration.

The months of February and March of the present year were devoted by the supporters of the old code to the perfection of an organization, the purpose of which was to restore, if possible, the old code in this State. Such an organization was formed, and its efforts during the year have borne fruit, as we shall see later. During the month of March, Dr. Austin Flint commenced a series of papers in this journal on "Medical Ethics and Etiquette," which were a commentary on the American code as viewed from the standpoint of its supporters. Of this commentary we shall examine but a single portion, that relating to the subject of consultations. As we all know, the rule of the American Medical Association reads as follows: "But no one can be considered as a regular practitioner, or a fit associate in consultation, whose practice is based on an exclusive dogma," etc. Concerning this, Dr. Flint says: "The foregoing section has of late been made the subject of much discussion. Of the entire code, this section alone has occasioned dissension."

Dr. Flint is here mistaken. The new-code party, or, to speak more strictly, those who drafted the new code, were dissenters from the old for more reasons than this. When they found that prominent members of the profession, including many dignitaries of the American Medical Association, were the direct promoters of quackery and the use of secret nostrums, through the testimonials given in support of them, and when they found that the American code was apparently unable to repress these abuses, they endeavored in the New York State code to find an effective remedy. An examination of this code, especially its first section, will show how this difficulty was met, despite the fact that an effort of the same kind encountered defeat at a recent meeting of the American Medical Association. This certification of the value of nostrums by prominent members of the profession we personally consider as one of the most unfortunate developments of the last few years. It is true that some members of the profession in this city fell into the traps laid by cunning manufacturers, but the prompt action of the County Society checked the further extension of this evil. This was effected by the passage of a special resolution, as the Committee on Ethics found that the American code was defective on this point. When, in 1882, the attention of the American Medical Association was called to

the abuse in question, its Judicial Council refused to make any provision for its abatement, fearing, perhaps, to cast any reflection on those of its prominent members who were, or who had been, advancing their own interests at the expense of the mass of the profession. The first section of the State code we personally regard as the most important, and we would be perfectly willing to strike out all that follows if by so doing we could secure harmony on the questions now at issue.

Dr. Flint further says: "The writer of these remarks is one of many who think that the code is here open to objection, not, however, in spirit or intent, but in phraseology." From this it would seem that Dr. Flint approves the sentiment or spirit of the consultation clause, but does not approve of the language in which it is clothed. Let us, therefore, consider these points. The intent of this clause appears to be the prohibition of consultations with certain persons in consequence of their methods of practice, founded on a belief in the value of a special exclusive dogma, together with the rejection of certain aids approved by the regular profession. Dr. Flint, however, a little farther on, says that a practice based on an exclusive dogma is not valid ground for an objection to consultation. "Any physician has a right either to originate or adopt an exclusive dogma, however irrational or absurd it may be." We must here confess our inability to reconcile the last two sentences that we have quoted. That Dr. Flint should say that he approves of the "spirit or intent" of the restrictive clause in the code, and a moment later say that the adoption of an exclusive doctrine is not valid ground for refusing to meet a practitioner in consultation, certainly appears to us discrepant and inconsistent.

The code having forbidden consultation with certain persons, let us ascertain, if possible, what persons are intended. On this point Dr. Flint says: "At the time when the code was adopted by the American Medical Association, the irregular practitioners, so-called, were for the most part uneducated men, whose practice was not only based on an exclusive dogma, but professedly to the rejection of the accumulated experience of the profession, and of the aids actually furnished by anatomy, physiology, pathology, and organic chemistry. They were steam-doctors, or Thomsonians, botanical, or herb doctors, eclectics, and the like. A system of practice based on the dogmas of Hahnemann had not then secured a hold on popular favor. A considerable number of those who became homœopathic practitioners, as they are termed, were from the ranks of the medical profession, and had received a regular medical education. Since the adoption of the code, this system has obtained a legal recognition. It has its societies, colleges, and journals. The homœopathic practitioners are an organized class, distinct from the regular profession. They are candidates for practice on the ground of a radical distinction in their therapeutical system, and it is on this ground that patients elect their services. Meanwhile, other systems in antagonism to the regular profession are comparatively insignificant as regards the number of practitioners and of patients."

Although the foregoing would seem to imply that the

anathema of the code was directed as much, if not more, against the various nondescript practitioners of the time as against the homœopaths, the wording of the code itself would almost to a certainty indicate that it was specially intended to prevent consultations with the latter, as none of the other practitioners had even the pretense of an exclusive dogma. Dr. Flint, however, is, we think, in error when he states that these practitioners had not at that time acquired much hold on popular favor. As early as 1844 they had acquired sufficient hold to enable them to secure the repeal of the most important section of the Medical Acts of 1827, which, as we have already shown, opened wide the gates of the State to all forms of quackery.

Dr. Flint says: "Since the adoption of the code, this system" (homœopathy) "has obtained a legal recognition." This legal recognition we believe to have been the direct consequence of the code, and that it would never have been obtained except for the occurrences that grew out of the operations of the code. This is, of course, purely a matter of opinion, but in the present instance is based on a careful and extensive reading of the controversial literature of those days.

Continuing his commentary, Dr. Flint says: "It is fair to conclude that the framers of the code had no feeling of illiberality, and no intention to interfere with the practice of medicine, under any circumstances, in the cause of humanity. The code declares explicitly that in consultations the good of the patient is the sole object in view, and enjoins against declining consultations on the score of fastidiousness. The restrictions of the code are in no wise inconsistent with the demands of humanity in cases of emergency. In saying that certain practitioners are not to be considered as regular or fit associates in consultation, it is neither said nor implied that a physician should not see a patient, even with these practitioners, when humanity requires him to do so. The tenor and spirit of the code throughout are opposed to any act of professional inhumanity. Moreover, in particular cases the physician must be the judge of his duty in this regard."

The view of the code here taken is certainly a novel one, and one that, so far as we are aware, has never before been publicly advanced. Certainly the American Medical Association has never given its official sanction to this explanation of its consultation clause, nor has any other society, when called on to enforce the code, accepted such from delinquents as a sufficient excuse for their misdoing. It must therefore be considered as a purely personal view, and as such does honor to its promulgator. Divested of unnecessary verbiage, it simply means that the American code permits consultations with homœopaths in emergencies, and when demanded by the dictates of humanity, and makes the individual practitioner the judge of the necessities and proprieties of the case.

Let us compare this with the consultation clause of the State code, the first sentence of which reads as follows: "Members of the Medical Society of the State of New York, and of societies in affiliation therewith, may meet in consultation legally qualified practitioners." The second sentence is in antithesis to and an explanation of the first,

and reads as follows: "Emergencies may occur in which all restrictions should, in the judgment of the practitioner, yield to the dictates of humanity." It will be noted that this code neither obliges, recommends, or encourages consultations with homœopaths; it simply permits them under circumstances which are specified, and leaves the conscience of the individual physician interested to act as the judge of the necessities of the case. In what respect, we may ask, does this code differ from the American code as interpreted by Dr. Flint? We believe the veriest hair-splitter would find great difficulty in establishing even the minutest difference between the spirit and intent of the one code and the spirit and intent of the other. And yet this difference, whatever it may be, is the nominal cause of the hostile attitude of two important portions of the profession. What reason is there, then, for any further prolongation of the contest? None whatever, so far as the merits of the case are concerned, unless perchance Dr. Flint's interpretation of the code should prove not to be the correct one. There can be no question as to the truth of the assertion that until within a very recent period the American code has almost universally been interpreted as absolutely forbidding mixed consultations, under every and all circumstances, the individual practitioner not being permitted to use the slightest discretion in the matter, except at the risk of professional animadversion. Humanity or emergencies found no place in the bosom of the heresy-hunter, whose special delight, apparently, was to detect some unfortunate practitioner whose heart had gained the better of his prudence. The issue here is plain. Either the old and orthodox interpretation of the code must be accepted, or else the one offered by Dr. Flint. In the latter event it certainly seems to us preferable to accept the phraseology of the State code, the meaning of which is clear and distinct, than to cling to the American, the language of which apparently permits of the most opposite interpretation. Dr. Flint, however, believes that consultations with homœopaths should be forbidden for reasons which we find for the first time stated. He says: "The true ground for refusing fellowship in consultations, as in other respects, is a 'name and an organization distinct from and opposed to the medical profession.'" . . . "It is to be hoped that the body from which the code emanated—namely, the American Medical Association—will adopt such modifications in the phraseology of this section as will place restrictions on consultations, not on the ground of doctrines or forms of belief, but on separation from and avowed antagonism to the medical profession." . . . "If homœopathic practitioners abandon the organization and the name, provided they have received a regular medical education, there need be no restrictions on consultations other than those belonging to other portions of the code, whatever therapeutical doctrines they may hold."

It would appear from the foregoing that Dr. Flint's main objection to the homœopaths, from the consultation aspect, is the fact that they have formed medical associations outside those of the regular medical profession, and not in affiliation with them, and that, as a consequence of this, they should be denied professional recognition, and their patients should be denied the advantages of regular

advice when such is needed. It does not appear even that emergencies or the calls of humanity would permit an evasion of the rule. In other words, the homœopathic practitioners are to be denied recognition, and their patients punished simply because they have established separate organizations. We believe the existence of separate sectarian organizations to be a great evil—one of the greatest that at present afflict the body medical—but we are not disposed to hold up the homœopaths to utter condemnation on account of their existence, when the medical profession itself is mainly the cause of their existence. We have already shown that the homœopaths did not leave the regular societies *voluntarily* and for the purpose of organizing separate societies, but, in fact, were forced out of the established bodies. A recent writer,* commenting on this very point, says:

"But there is, according to Dr. Flint, still a disqualifying cause which should exclude homœopaths from consultations, and this is the assumption of a name and organization distinct from and opposed to the regular profession. There is undoubtedly force in this objection, but, if we look at the history of the rise and growth of homœopathy in this country, the objection will be weakened, if not invalidated. Surely the doctor is old enough to remember the persistent efforts made in the beginning by the homœopaths, when as yet they had no organization, to be admitted into our county medical societies, or in the case of members of the societies who adopted homœopathy to resist expulsion. The numerous suits unsuccessfully brought before the courts to compel the societies to admit or retain them sufficiently attest that, if they now have a distinct organization, the fault is not on their side. We thrust them out of doors, and now it comes with a bad grace from us to give as a reason for refusing fellowship with them that they are not in our house."

We have no hesitation, therefore, in asserting that Dr. Flint's proposition savors neither of justice nor propriety, and that some better excuse must be devised for excluding homœopaths from consultation when the demands and needs of the sick render such consultations desirable.

While Dr. Flint's commentary on the code was being published in the columns of this journal the supporters of the American code sought to effect an organization of the physicians of this State in opposition to the State society, and with the avowed purpose of resisting any modifications of the code that did not originate with the American Medical Association. A vigorous canvass of the State was made in behalf of this organization, and numerous signatures were obtained to a paper pledging its signers to stand by the American code. This action necessitated the formation of another association, one opposed to the re-enactment of the old code. This latter body forwarded to each member of the regular profession of the State a postal-card bearing on its back the following words: "I, the undersigned, am opposed to the present code of ethics of the American Medical Association, and approve of the use of all honorable means to prevent its re-enactment in the State of New

* Dr. Thomas Hun, in "An Ethical Symposium," New York, 1883, pp. 60, 61.

York." The majority of those who signed this declaration and mailed the card back to New York simply attached their signatures and addresses. Many, however, added a few words of comment. All of the cards that were returned to the city came under the eye of the writer, and from them we have copied the following words of comment:

"and all other codes, as thirty years adherence to it has proved its uselessness."—S. F. McF.

"and so is the ——— County Medical Society as a body."—R. L.

"I am strongly in favor of the abolition of all codes, considering any code unnecessary for the guidance of a gentleman, and useless for the restraint of others."—T. C. W.

"I think that the old code was a good one when adopted, but there are reasons why it should now be rejected."—S. P. S.

"I have practiced my profession since 1845, and do not hesitate to say that I do not recall the time or instance when the old code governed the conduct of men of good sense or repute."—E. V. K.

"I would much rather prefer no code at all. But, being obliged to choose under existing circumstances, I say, emphatically, give me the new code."—M. G. P.

"I heartily indorse this card. Had the same position been taken twenty years ago it would have been better for the people and the profession."—J. R.

"The more liberty we have, the greater amount of good we can do."—L. B.

"I regard the new code as a most unfortunate and unwise substitute for the old code. Abolish the whole thing."—J. M. N. K.

"I have protested against it for eighteen years, and will do all in my power to aid in its overthrow."—C. H. A.

"I believe in each physician practicing medicine according to the dictates of his own conscience."—F. W. C.

"Hope we will succeed. New York can afford to be not represented at the American Medical Association. If we make a bold stand I think we will win—we have the right side, any way. *I am for no code.*"—R. F.

"After obeying and carefully observing the rules of the old code for many long years, I have become strongly opposed to it, and am in full accord with the new code; and am willing to do what little I can to maintain it in the State of New York.

"I see its opposers are working hard, almost moving heaven and earth to bring about its repeal; but I do not think they can succeed. . . . It (the American code) is not in accord with the spirit of the age; it is against the common-sense law of the land, and the best sentiment of all classes of society."—W. B. A.

"I think a code of ethics for the medical profession as unnecessary as a book of etiquette for a true gentleman."—H. F. B.

"An unwritten code is as binding to an honorable, honest man, and a written code, however stringent or liberal, will have no influence over the conduct of any others."—H. A. B.

"I prefer not to be tightened up by any code; shall in the future do as I have done in the past—uphold the dignity and honor of my profession, in my own way, to the best of my judgment."—J. R. B.

"and I am opposed to the pretentious and hypocritical old code of the New York State Medical Society."—L. C.

"The new code does not cause irregulars to rejoice, nor does it encourage a single wrong; the new code is legal; it is the voice of the age. It is progress."—S. J. P.

"Most heartily."—F. W. A.

"In the name of humanity, decency, and liberal progress, Amen!"—H. L.

"I did not approve of the change, but, since it has been done, would not turn back."—C. S. P.

"I would prefer no code, but, if we must have one, let it be liberal."—O. C. F.

"believing *no* code as effective as *any* code."—J. H. F.

"because it can't be lived up to in actual practice. We must meet irregulars, and, if gentlemen, we must treat them as such."—P. K. S.

"I am in favor of free consultations."—J. T. L.

"Patients first, ethics next, and liberal opinions all the time."—C. M. McL.

"I am in favor of the present code of ethics of the American Medical Association, and approve of all honorable means to effect its re-enactment in the State of New York, hoping that we may soon have it amended in a way that will leave all at liberty to *council* with all whom they please, and not admit (as the present code does) that the Legislature is competent to say with whom it is proper and right to meet in consultation. A code of medical ethics should ignore all sects in medicine."—L. B.

The foregoing comments certainly indicate a wide diversity of feeling on the questions involved in the present discussion, and the different standpoints from which they are viewed.

The next important event in connection with the code controversy occurred at a meeting of the New York Academy of Medicine in April last. This body, by virtue of its charter, is entitled to representation in the State society. Its by-laws, however (unlike those of the county societies), are not subject to the revision of the State society. The Academy has generally been regarded as the peculiar stronghold of the conservatives, it being claimed that they possessed a large majority in that body. Some question having arisen as to the right of the Academy to representation in the American Medical Association after the exclusion of the New York State society, it seemed important to the old-code party to place the Academy distinctly on record as a supporter of the American code. At a meeting of the Academy, held on the 19th of April, Dr. Austin Flint, Jr., introduced a series of resolutions disavowing sympathy with the action of the State society, and pledging the Academy to renewed allegiance to the code of the American Medical Association. The Committee on Admissions of the Academy was also directed to report for membership only such persons as would pledge themselves to support the old code. The resolutions were adopted by a large majority, obtained by the very simple expedient of assembling the old-code members by means of a secret circular, and without notice of the proposed action to the other side. The detailed proceedings of this meeting of the Academy have obtained a very wide publicity, and need not here be rehearsed. It was at this meeting that Dr. Flint, Jr., first appeared as the virtual leader of the old-code element, and indicated that the policy to be pursued would be characterized by the *fortiter in re*, rather than the *suaviter in modo*. In other words, opposition was to be overcome by brute force, rather than by an appeal to argument and reason. This, indeed, was so thoroughly characteristic of the methods that for years have prevailed in the American Medical Association itself that we need not be surprised at anything that is done in its name. The effect of this action in the Academy

was not all that was hoped by its supporters. Instead of strengthening the old-code party in this city, it distinctly weakened it. Many gentlemen whose bias was in favor of the old code, and who were willing to vote for its restoration, recoiled at the means that the leaders of their party seemed disposed to adopt, and declined to follow them farther. This was most conclusively shown a few months later.

The American Medical Association met early in June, and when the members assembled they found themselves confronted with an order from the Judicial Council, notifying them that they would not be permitted to register and take part in the proceedings of the meeting unless they signed a pledge of fidelity to the code of ethics. This pledge terminated with the words: "I will use my best efforts to maintain the same, and in testimony whereof, I hereunto affix my name." A careful examination of the constitution and by-laws of the association fails to discover any authority for this action of the Judicial Council. It was a pure assumption on their part, for which they possessed no warrant whatever. This action of the council does not surprise us; in fact, nothing that this body should do, or attempt to do, would surprise us. We were, however, immeasurably surprised that any of the members of the association were willing to be thus deprived of their liberty of action, or to deprive their fellow-members of theirs. We believe that the majority of the signers could hardly have been aware of the full intent of the pledge they were signing, as it virtually binds them to use their best efforts to maintain forever, without change, the present code of the American Medical Association.

We see in this act of the Judicial Council and of the association a striking example of the dangers that beset every unchartered and irresponsible body; a clique, once getting into power, hold the members at their mercy, and are enabled to trample on their rights at any moment, without fear of being held accountable, either as individuals or as an association. Not so in a chartered society, even with by-laws identical with those of the American Medical Association. Such a society would have been compelled to admit its regular members, irrespective of signing or not signing such a pledge. Doubtless the old-code members of the New York Academy of Medicine would be very glad to exclude from the meetings such of its members as do not approve its present code and by-laws; but they know such an attempt would prove futile. In a chartered society, every member knows, or can readily learn, his rights, and neither a ring, clique, nor even a majority in the society, can deprive him of them against his will. In an unincorporated society, however, anything may be done that at any time a majority approves, and there is no redress for those who may be injured thereby. For instance, in the American Medical Association a majority could, by mere vote, pass a resolution expelling all members who are opposed to them, and the expelled members would not be able to defend, or regain, their rights through an appeal to the courts. In fact, something very like this was done a few years ago. The writer attended a meeting of the association in 1865, and paid his fee of five dollars, which at that time entitled him

to life-membership, without further payment of dues. A few years later he, in common with other members who had joined the association on similar terms, was informed that his life-membership would be forfeited unless he maintained it by a further annual payment of five dollars. This was a most unmistakable breach of contract, and violated the commonest principles of honesty and morality. The instance is cited simply as an example of the many arbitrary acts of the association, and to show how any act may be done by any voluntary, unincorporated society. Despite these facts, there are those who desire to see the incorporated societies of this State subjected to the control of such a body. We can hardly believe that the gentlemen holding these views have given any very careful consideration to the subject. In common with the majority of the profession, we approve of the existence of a national medical association, but it should be one devoted to scientific pursuits only, and should not attempt to interfere with medical politics in any manner. If the American Medical Association would reorganize on such a basis, New York State, we believe, would be unanimous in its support. If it continues as it is, its existence is but a question of a very few years.

The refusal of the American Medical Association to permit those who did not approve its code to participate in the proceedings of the Cleveland meeting, thereby preventing any discussion of the subject, has proved to be one of the most valuable allies to the cause of the New York State code. It was generally supposed that the advocates of the American code in this State would endeavor to secure desirable modifications at the Cleveland meeting, and many signatures were obtained to the old-code papers in consequence of this impression. The warrant for this belief was the fact that Dr. Flint in his commentaries had expressed his dissatisfaction with the code, as already shown in the present paper, together with the peculiar wording of the papers sent for signatures. In fact, many signatures were obtained on the express representation that a change of the code would be attempted by the members from New York. No such attempt was made, and some of the old-code signers, now fully appreciating the fact that no change may be expected by the association, and not approving the code as it stands, have withdrawn their support and influence, and have given them to the State code. We believe that a majority of the old-code supporters gave their signatures not from a fondness for the old code, but from a belief that all changes in it should originate with the association. Many have the idea that the association possesses some sort of jurisdiction over the profession of the State, and that resistance to its by-laws is a species of rebellion against constituted authorities. This idea is an absolutely false and mistaken one. The association has no more jurisdiction over the different State societies than the American Gynecological or the American Dermatological Society has. Moreover, there is no process by which it could obtain such jurisdiction. No single State in the Union could give it a charter that would enable its power to be exerted beyond the limits of the State granting the charter; while the best that the United States could do would be to grant a charter the jurisdiction of which would be coextensive with the

District of Columbia. Congress has, for instance, the power to establish a medical college within the limits of the District, and to make the diplomas of the college licenses to practice within that area, but it does not possess the power to make them valid in any State in the Union. Such power exists solely in the respective States.

The profession of this State, and of other States as well, should remember that they are not doctors by divine right, or the grace of God, but simply through the will of the various State Legislatures. It is this which gives them a legal right to call themselves "doctors," and permits them to practice their profession. The Constitution of the United States guarantees a certain amount of freedom in the exercise of religious privileges, but it makes no such guarantees as regards the exercise of the legal, medical, or any other profession or trade. These rights the States reserved at the time of the formation of the Union, and since then have never yielded their prerogative to the national authorities. The action of the New York State society has been likened to the action of the Southern States at the commencement of the late "unpleasantness." It should be remembered that at the time of the formation of the Union the various States entered into a compact with each other, and that their secession was a breach of that compact. The Medical Society of the State of New York, however, never formed any compact, or entered into any contract with the American Medical Association or with any of the other States, nor, so far as we are aware, did any other State. There is therefore no analogy between the relations of the various States to the Union and the purely voluntary relation of the different State societies to the American Medical Association. The latter can, at any time it chooses, and for any cause, refuse to admit the delegates from any of the States. In like manner any of the State societies can sever its existing connection with the American Medical Association whenever it deems it to be to the interest of the profession of the State to do so.

In 1882 the New York society considered that it was better to relinquish its connection with the American Medical Association than to continue the connection, subject to the objectionable by-laws of the latter body. The association, on the other hand, thought it would be better to dispense with the representatives from New York than to alter its by-laws. This it had a perfect right to do, and no one, so far as we are aware, has found any fault with it for so doing. The only power possessed by the association is of a moral nature; legal power it has none. We should therefore judge its actions by the moral standard alone. The repudiation of its financial contract with its early permanent members, and the recent refusal to admit certain of its members, who under its by-laws were entitled to admission, should be sufficient to place the seal of condemnation upon the association, judged by the standard we have alluded to.

During the summer months there was an apparent cessation of active operations by both parties. Early in October, however, Dr. Fordyce Barker, the president of the New York Academy of Medicine, sent to each of the members a recommendation that the by-laws of the Academy be altered in certain respects. The Academy came into existence by

virtue of a charter from the State granted in the year 1847. This charter conveyed certain rights and privileges, none of them, however, of a medico-political nature. The Academy, shortly after its organization, assumed such powers, and, through its moral influence, exercised them for many years. The alterations of the by-laws proposed by Dr. Barker involved a repudiation of its former political aspirations, and the resumption of a purely scientific status, as contemplated in its original charter. To accomplish this end it would be necessary for the Academy to *repeal* its allegiance to the American code. This would require a three-fourths vote of its members. When the matter came to a decision, it was found that a three-fourths vote was not in favor of the repeal of the code, but, to the surprise of many, there was a very decided majority in favor of such action. The Academy therefore stands to-day as adverse to the old code, but without power to repeal it, while the minority who are in favor of the old code have no power to enforce it against the wishes of a stronger adverse sentiment. This is certainly an anomalous state of affairs, which can not continue for any great length of time.

For some months it had been claimed by the supporters of the old code that the general sentiment of the profession in this city was in favor of the re-enactment of the American code. It was asserted that a majority of the County society were in favor of such action. The test was made at the annual election of officers in October. On this occasion both parties brought to the polls their full voting strength. On counting the votes, it was found that there were 220 in favor of restoring the old code, and 375 opposed to so doing. It seems quite certain that the old-code association had secured, early in the spring, a sufficient number of supporters to give them hopes of success. When the matter came to a vote, however, both in the Academy and in the County society, the result showed that there had been many breaks from the old-code ranks. Many gentlemen, who in the spring had hastily signed the old-code papers, on careful examination of the subject reconsidered their action. Many others regarded the occurrences that took place at the April meeting of the Academy of Medicine a sufficient ground for withdrawing their sympathies from the leaders of the majority on that occasion. A still greater number, however, we are satisfied, abandoned the fortunes of the old-code party in consequence of the failure of the leaders of that party to even attempt to secure changes in the American code that so many of their followers considered desirable.

We may, I think, consider the code question as definitely settled, in this city at least, so far as regards the restoration of the code of ethics of the American Medical Association. The County society, the only body that can legitimately consider the question, at the last election, as on every previous occasion on which the matter has been brought forward, distinctly expressed its sentiments in opposition to the old code. It is true that the question can hardly be said to have reached a final solution in the Academy of Medicine. This body, with a limited membership, possesses but a limited influence on the mass of the profession, and it is of very little practical consequence

which way it is decided in that body. The liberals, it is true, are in the majority, and will, without the slightest doubt, remain so, and may expect accessions both from the ranks of the present conservatives and from among those who in the future become members. As we have already shown, the code has been for many years practically in abeyance in the Academy, so far as its enforcement was concerned, and there is but little likelihood that its vitality will ever again be tested in that body. Such being the case, we are perfectly willing that those who profess to admire the code should continue to wear it as an ornament and a phylactery.

Before closing this series of papers, one or two questions of importance require notice. As we have already shown, certain of the county societies of this State repudiated the action of the State society in the matter of the code, and declared that they would stand by the old code and retain it among their by-laws.

It has been thought by some that such action on the part of the county societies would forfeit their title to representation in the State society. Such, however, is not the case. There is no provision in any of the statutes by which the State society is empowered to deny the county societies the right of representation, no matter how rebellious they may be as regards the edicts of the former body. The only way in which the State society can defend itself in the matter is by a direct application to the Legislature to have the charters of the offending societies revoked, as provided for in Sec. 2 of Article V of the by-laws of the State society. There is little doubt that, in the present state of public opinion, if such application were made to the Legislature, the request of the State society would be promptly granted. The county societies, however, should be aware that any code or by-laws they adopt contrary to the wishes of the State society are absolutely illegal and null and void. The importance of this matter suggested to the writer the advisability of obtaining the opinion of legal counsel concerning it, and to this end we submitted the following question: What will be the effect if a county medical society adopts a by-law which is not in accordance with the ordinances of the Medical Society of the State of New York, or which does not receive the approval of said State society? The answer to this question was as follows:

"By the provisions of Sec. 14 of the Act of 1813 (Chap. 94), it is made 'lawful for the respective' (county) 'societies to make such by-laws . . . as they shall think fit and proper, provided . . . that the by-laws . . . shall not be repugnant to the by-laws, rules, and regulations of the Medical Society of the State of New York.'

"And, by the provisions of Sec. 1 of Chap. 445 of the laws of 1866, it is declared to be 'lawful for any county medical society in this State . . . to establish such rules and regulations for the government of its members as they may deem fit, provided the action of such societies receive the sanction of the said State medical society.'

"I am, therefore, of opinion that any such action on the part of a county society would be null and void and of no effect; in other words, as the law stands, the county societies can not adopt a by-law such as is suggested by the

question, and any attempt to do so would be idle and of no avail."

We here leave the question of the codes and the status of the profession, with the statement that we have endeavored to be accurate as to facts, logical as to inferences, and moderate but candid in the expression of opinion. We can not but hope that the whole matter will receive a speedy solution, and one that will commend itself to the great majority of the profession in this State.

SOME CRITICAL REMARKS IN REGARD TO THE USE OF ANTIPYRETIC AGENTS IN TYPHOID FEVER.

BY BEVERLEY ROBINSON, A. M., M. D.,

PROFESSOR OF CLINICAL MEDICINE AT THE BELLEVUE HOSPITAL MEDICAL
COLLEGE, NEW YORK.

FOR several years past it has seemed to me that medical acumen had gone astray somewhat in regard to the proper uses and limitations of antipyretic medication, particularly in the treatment of some usual acute febrile disorders. In no disease is this statement more correct than it is with respect to typhoid fever. It is eminently fitting, therefore—as some of us are now engaged in combating a marked epidemic of this disease, and as, at relatively brief intervals, some new antipyretic agent is brought before the medical world with more or less readily acquired encomiums—to interrogate, from the experience which close clinical observation has afforded, the reasons why we give these remedies, and to ask ourselves if the results obtained are commensurate with the evils produced. The few cases just reported in this country of the use of kairine as a new antipyretic remedy in typhoid fever have, I confess, prompted me to unburden myself in regard to a subject which otherwise I should have delayed doing a little longer. As it is, I merely wish to direct attention to some *timely* considerations, which, I trust, will not be without value.

1. It is ordinarily assumed that high temperature in typhoid fever is necessarily a bad symptom, because it promotes tissue changes, which of themselves may occasion a fatal termination.

2. That we have in certain well-known agents—viz.: cold, quinine, salicylates, aconite, veratrum, digitalis, and, latterly, kairine—efficient means to lower temperature.

3. While at times reference has been made to some of the objectionable symptoms occasioned evidently by the use of remedies to reduce high temperature, these sequels have not hitherto appeared sufficient to weigh equally with the presumed advantages from their employment.

In regard to the first-mentioned proposition, I would state that high temperature in typhoid fever is *not necessarily a bad symptom*. Of course, there are many cases in which typhoid fever is accompanied during life not only by intermittent or continuous high temperature, but this temperature is likewise a part of a series of grave symptoms. If the patient die under these circumstances, muscular and visceral changes of a degenerative kind are *usually* encountered. *Per contra*, I have seen many cases of typhoid fever in which the average temperature ranged for many days

over 102° or 103° Fahr., and yet no delirium, no excessive diarrhœa or tympanites, no nervous disorder, was at any time present. I have also seen other instances in which there had not been a really high temperature during the whole course of the disease, and yet the termination was a fatal one, and the autopsy gave evidence of advanced degenerative tissue changes.

In regard to the second proposition, I agree that the agents mentioned will *frequently* lower temperature very considerably during several hours. I affirm, however, that their repeated use is essential if we wish to *keep* the temperature down in any given case; and, further, that, in many cases of a *grave type*, in which the temperature has had a high range almost from the inception of the disease, the ordinary antipyretic agents have had little or no effect upon the reduction of the pyrexia. In such instances, let it be clearly understood the case has been one of *serious* import, not merely by reason of the more or less continuous high temperature, but equally because most of the other symptoms denoted an unusually grave general condition. In regard to the third proposition, I would say in regard to cold baths, affusions, douches, and even the cold wet-pack, while I have at times, unquestionably, seen good results proceed directly from their use in the treatment of typhoid fever, nevertheless I have quite as frequently—nay, oftener—observed symptoms of lowered reaction—viz., cold and blue extremities, cyanosed and pinched features, unequal and feeble pulse, shallow and irregular respiration—which were obviously thus occasioned, and made me strongly question their utility. Quinine in antipyretic doses, whenever it lowers high temperature in an appreciable manner, does so, according to my observation of febrile disease, by reason of its lessening *cardiac power* and *arterial tension*. Now, then, if this be true, is it not dangerous to produce these effects in a disease where local congestions of viscera are so frequent? and, if the answer be affirmative, How, then, do we recognize its utility, with the exhibition under similar circumstances of frequently repeated doses of alcoholic stimulants, to sustain respiration and enfeebled cardiac power?

To attempt reduction of temperature in typhoid fever by means of the salicylates seems to me, unquestionably, bad treatment in the majority of cases: first, because the salicylates (with the exception of the natural salicylate, i. e., ol. gaultheriæ) almost invariably produce stomachal disturbance and even rejection, and, further, their effect is, in anything like large doses, always depressing. Aconite does bring down temperature, as we all know, in a very remarkable manner, where disease is ephemeral in character; but can it be judiciously employed with this object in view in a prolonged, wearisome affection like typhoid fever, where every atom of vitality should be economized and not a molecule uselessly wasted? I am glad to add that rarely has any one made use, in latter years at least, of this paralyzing agent to lower high temperature in continuous fever. What is true of aconite is true, *only* in a greater degree, of veratrum.

Digitalis is, therefore, the single remedy which remains to be considered in this connection. If digitalis lowers temperature effectively, it does it by strengthening, equaliz-

ing, and slowing the cardiac beats, and by increasing arterial tension, especially in the smaller vessels. If, therefore, the heart be weak, irregular, unequal in its action, as it often is in grave cases of typhoid fever, it appears rational to make use of moderate doses of digitalis. But even in regard to the use of this drug a word of caution is required if we go beyond a somewhat restricted limit of dose. Digitalis is a cumulative remedy, when long continued, and, if given in large doses, or too frequently, instead of steadying the heart, it too often makes the cardiac beats more rapid, unequal, and wavering. It is also at times rejected by the stomach, and for this reason alone we are compelled to abandon its use. Further, if we give only such doses internally as lend additional power to cardiac muscular contractility, is the use of digitalis in grave cases of typhoid fever altogether without drawbacks? Let it be remembered that it is in these very instances that degeneration of cardiac muscular fiber is feared and likely to occur. If this be true, is it rational to make this organ contract with acquired energy when the object to be attained—viz., the reduction of temperature—is probably far less to be desired, on the one hand, than the acute dilatation of the cardiac cavities is to be dreaded on the other?

In regard to the third proposition, I claim already the right to be heard, and I would further direct attention to the following considerations: Of course, if high temperature were invariably a dangerous symptom, or if by its reduction, even though temporary, we might expect the general condition to be improved, we should surely be usually justified in using the means to produce the desired result. But, as a matter of fact, high temperature is *not*, as I have already stated, of necessity allied with other symptoms which directly imperil life. Temperature may be *high* (not *excessive*)—102°, 103°, 104°, or even 105°, Fahr.—and yet the pulse and respirations may be regular, and neither rapid* nor weak. The nervous symptoms may likewise be of relatively mild type. Why, therefore, consider the mere lowering of the temperature so important? Almost every acute infectious febrile disease has a normal march toward recovery, or occasionally shows a sure progress toward death. If this premise be admitted, it follows that our efforts should not be in the direction of too great interference with the symptom, *high temperature*, when other symptoms are benign. In many instances, moreover, it as definitely represents an integral, essential part of typhoid fever as does any one among the characteristic anatomical lesions.

Further, if in our methods of managing acute diseases we abstain from the use of disturbing agents with great power for harm, we at least manifest a degree of commendable caution for which our patients should be grateful; but when, as in the last antipyretic drug presented to our notice, we find that at a certain period of its exhibition the patient is attacked with a *severe chill*, and that, even while the drug is being given in quite large doses and at short intervals,

* "Kairine as an Antipyretic in Typhoid Fever, with Cases." "The Boston Medical and Surgical Journal," November 1, 1883, pp. 415-417; also see pp. 418 and 420. Any one who shall read with an unbiased mind the cases and discussion here reported will scarcely be tempted to repeat the experiments of Drs. Shattuck and Draper.

the temperature has risen almost to the height reached before it was begun, it is full time to stop and ask ourselves, *Cui bono?*

In the words of Jenner, I conclude by saying that that man will be most successful in treating typhoid fever "who, when presenting an active remedy, weighs with the greatest accuracy the good intended to be effected against the evil the prescription may inflict, and then, if the *possible evil* be death, and the *probable good* short of the saving of life, holds his hand."

TWO CASES OF AMPUTATION OF THE PENIS, WITH TRANSPLANTATION OF THE URETHRA INTO THE PERINEUM, ON ACCOUNT OF EPITHELIOMA.

By JOHN A. WYETH, M. D.,

PROFESSOR OF SURGERY IN THE NEW YORK POLYCLINIC; SURGEON TO MOUNT
SINAI AND ST. ELIZABETH HOSPITALS.

CASE I.—F. F., aged fifty-six, a German by birth, married, and a cabinet-maker by trade, presented himself, March 9, 1883, for treatment at my clinic, at the New York Polyclinic, having been sent to me through the courtesy of Dr. C. W. Pfeiffer, of this city.

He gave the following history to the class: Ten weeks before, he noticed a pimple on the prepuce, which had always been adherent to the glans. He denied all venereal disease and the possibilities of contagion. From the initial pimple the disease had spread, slowly at first, but more rapidly within the two weeks prior to his applying for treatment.



FIG. 1.

The anterior third of the penis was greatly swollen (as represented in Fig. 1, made from an accurate drawing by my friend Dr. J. A. Andrews), and on one side, about one inch and a half from the meatus, there was a phagedenic perforation of the tissue, through which the entire flow of

urine escaped. The inguinal and lumbar glands were slightly enlarged, and the skin of the patient was of a pale-yellowish hue.

The diagnosis of epithelioma was made, and was subsequently confirmed by my colleague, Dr. Gerster, and by my friend, Dr. E. A. Banks, whose wide experience in diseases of the genito-urinary organs has been of invaluable assistance to me. Amputation was advised for the following reasons: The stench from the phagedæna was exceedingly offensive. It was doubtful whether the glands were enlarged as a result of inflammation or of metastasis. The comfort of the patient was greatly interfered with, and it was believed that his life would be prolonged by the operation.

The operation was performed before the surgical class of the Polyclinic, in the operating-room of Mount Sinai Hospital, on March 18, 1883. The procedure was that which is advised by Humphrey in Holmes's "Surgery." A ligature was applied around the organ close to the pubes, and the penis was cut smoothly off as near the ligature as was possible. The bleeding vessels of the corpora cavernosa having been tied, the scrotum was transfixed at the perinæum, and the urethral tube was dissected out from between the corpora cavernosa for an inch and a half, and then turned back through the scrotum to the perinæum, where the end was split up for half an inch on the upper wall, and the edges sewed to the incision in the perinæum.

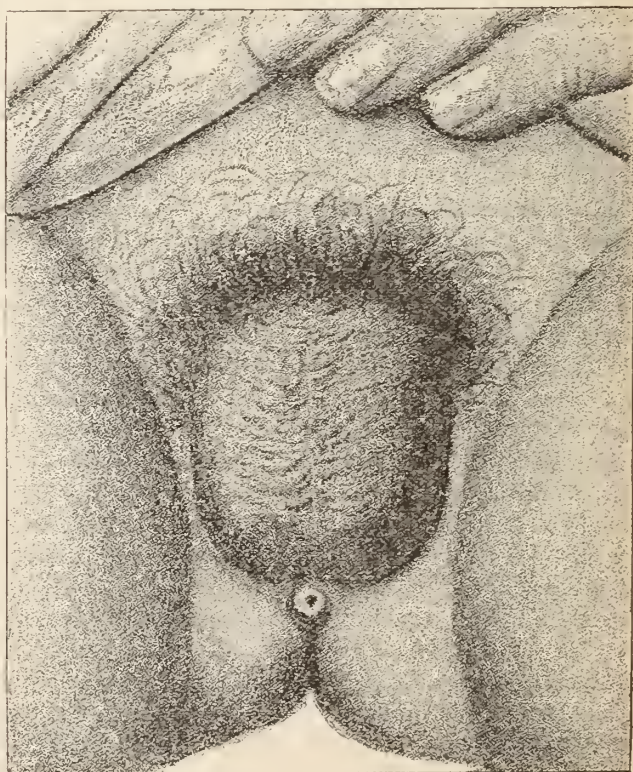


FIG. 2.

The scrotum was carried up and sewed to the integument of the pubes, completely covering in the stump of the penis. A drainage-tube was passed through the scrotum from the upper incision to the lower projecting part in front of the urethral opening in the perinæum.

The temperature, which had been as high as 102.4° F. previous to the operation, was 102.2° fourteen hours after, and declined gradually to 99°. The wounds healed promptly, the patient was discharged May 14th, and in June he returned to his work. I saw him a few weeks after this date, and found that the glands were of normal size, his skin had assumed a more healthy color, he had gained in weight and strength, and he believed himself cured. He urinated freely through the new opening, and was comfortable. Since that time I have not heard from him, as he changed his address and has not reported to me.

The microscopical examination of the tumor proved it to be epithelioma.

CASE II.—G. D., aged thirty-eight, a native of this country, married, and by occupation a butcher. Came under observation at Mount Sinai Hospital September 12, 1883. He denied positively all venereal disease. Arcus senilis was well marked. His family history was negative. He had congenital phimosis, and for several years he had noticed a pimple on the mucous margin of the preputial orifice. Nine months before, a discharge of pus commenced from this sore, which, however, did not increase in size until five months later, when it became greatly swollen, painful, and discharged a considerable quantity of fetid pus.

On admission to the hospital, the tumor was two inches in diameter, and occupied the anterior half of the organ. It had the usual cauliflower appearance, and emitted a penetrating and offensive odor. The patient complained of pain except when resting on his back, and a stinging sensation during efforts at micturition, which were prolonged and ineffectual. The inguinal glands were not markedly enlarged. A disinfectant wash was used and amputation was advised, and was performed September 18th.

Exactly the same operation was done as in the preceding case. There was found to be a close stricture in the membranous portion of the urethra, which was dilated. The night following the operation the drainage-tube was carelessly allowed to get over the orifice of the transplanted urethra, permitting the urine to run up the tube and infiltrate the scrotum, which accident ultimately caused considerable sloughing of the tissues between the two tunicae vaginales. The temperature rose on the second day to 104° F., and, after this, gradually declined to the normal. The wounds and the sloughing surface healed rapidly, and the patient was discharged, in good condition, on October 28th.

November 11th he came before the class at the Polyclinic. The wounds were perfectly healed, he had gained in flesh and strength, and passed his urine easily and without discomfort. He reported that he had returned to his work as a butcher.

A PROVIDENTIAL ACCIDENT.—A patient with locomotor ataxy consulted Dr. W. A. Hammond, of New York, who advised him to go to bed, and remain there for at least six months. The patient said it was impossible for him to go to bed, and if that were necessary he must give up treatment. On leaving the consulting-room, however, he luckily slipped and broke his thigh, and, being taken home, he completed his good fortune by calling in an "irregular practitioner," who kept him in bed for a year. At the end of that time the patient arose, cured not only of his fracture, but of his ataxy also, and has remained well ever since.—*Med. Times and Gaz.*

A NEW OPERATION FOR THE REDUCTION OF CHRONIC INVERSION OF THE UTERUS.*

By B. BERNARD BROWNE, M. D.,

PROFESSOR OF DISEASES OF WOMEN IN THE WOMAN'S MEDICAL COLLEGE OF BALTIMORE; FELLOW OF THE AMERICAN GYNÆCOLOGICAL SOCIETY, ETC.

AFTER devoting a considerable amount of time to the study of the different methods of replacing a complete inversion of the uterus of long standing, and appreciating the difficulties and dangers attending the operations already devised, I concluded to adopt a new procedure in a case which resisted many of the methods referred to.

The simplicity of the operation, and the ease and success with which it was performed, lead me to suggest it as one to be considered in all difficult cases.

The problem to be solved is, how to get the fundus back through the rigid and constricted cervix.

The injuries which frequently result from prolonged taxis, such as rupture of the vagina, rupture of the uterus, peritonitis, etc., are well known. Repeated failures at reduction have occurred to the most skillful operators. Up to this time Thomas's method, which consists in abdominal section over the cervical ring and dilatation from above, has been the only one that could be said to be absolutely sure of accomplishing the replacement in cases which had resisted the other plans—such as the rapid reduction by taxis; Noeggerath's method of indenting one horn of the uterus and reinverting it first; Courty's method of passing two fingers into the rectum and dipping them into the cervical ring, with counter-pressure upon the fundus; Emmet's plan of receiving the fundus in the palm of the hand and spreading the fingers out in the vagina, with counter-pressure from above; or the very excellent and successful method of Dr. I. H. Tate, of Cincinnati, which consists in holding the cervical end of the uterus firmly between two fingers in the rectum and one in the bladder, while the thumbs press upon the fundal extremity.

The patient upon whom I operated presented the following history:

Mrs. I., aged twenty-eight, white, married ten years, has had two children, the youngest six years of age, and has had no miscarriage since. She is a large, stout woman, with thick abdominal walls, weighs about two hundred pounds, and has all the appearance of perfect health. Three months after her last confinement she had a severe hemorrhage from the vagina upon rising in the morning. She laid at the point of death for nine weeks, and since then has been unable to be out of bed for more than two or three weeks at a time, suffering at intervals with hemorrhages, which have lasted from two to four weeks. She has had to be extremely careful in her movements at all times, for fear of bringing on a hemorrhage. Her attending physician had made the diagnosis of "bleeding tumor of the uterus," and offered from time to time to remove it, which, fortunately, was not done.

In March, 1883, she came under my care, and was examined under an anæsthetic. The diagnosis of chronic inversion of the uterus was made. A prolonged effort at reduction by taxis did

* Read before the Baltimore Academy of Medicine, November 20, 1883.

not succeed in restoring the uterus, but a profuse hæmorrhage was excited by the manipulations, and the vagina had to be tamponed with cotton saturated with dilute Monsel's solution. A short time afterward another ineffectual effort at reduction was made. Then continued pressure with Gariel's air-pessary was resorted to, and used for six weeks, followed at the end of that time by another ineffectual effort at reduction by taxis. In October she came into the Woman's and Child's Hospital, where I made another attempt at reduction, trying Noeggerath's and Courty's methods, but again with failure. The os could be plainly felt through the rectum, but the cervix was so firm and unyielding that it could not be made to dilate.

On November 2d, the bowels and bladder having been evacuated, she was placed under ether, the inverted fundus was drawn outside the vulva with a strong vulsella forceps, the openings of both Fallopian tubes were brought plainly into view, and an incision one inch and a half in length was made through the posterior portion of the uterus (avoiding the Fallopian tubes and larger vessels at the sides of the uterus). Through this incision Sims's large dilator was passed up into the cervix and expanded to the fullest extent; the rigid tissues of the cervix were felt to relax; then, upon withdrawing this dilator, Nos. 2 and 3 of Hanks's hard-rubber dilators (three fourths and one inch in diameter) were passed through the cervix. The finger was also passed to feel that there were no adhesions. The incision in the uterus was then sewed up with carbolized silk-worm gut, and, with slight manipulation, the fundus was easily replaced through the now passable constriction.

The whole operation was performed in less than thirty minutes. There was considerable hæmorrhage from the uterine cavity when the uterus was first replaced. On the next day the temperature was 102° Fahr., but gradually returned to the normal condition, which it reached on the fourth day. During the first week she complained of severe pain in the uterus, but this was controlled by full doses of opium.

She was placed upon the table and examined on the 14th (twelve days after the operation). The cervix was somewhat patulous, but, with this exception, the parts were all in a normal condition.

Conclusions.

1. This operation is not proposed to supersede ordinary taxis in the reduction of chronic inversion of the uterus.
2. It is not more dangerous, but much more certain, than prolonged or rapid taxis.
3. We avoid the danger of bruising the tissues and rupturing the vagina.
4. As an operation for inversion, it is less dangerous than laparotomy.
5. Unless there be adhesions (which rarely exist), we can always feel certain of reducing the inversion at one operation.

Book Notices.

A Practical Treatise on Materia Medica and Therapeutics. By ROBERTS BARTHOLOW, M. A., M. D., LL. D., Professor of Materia Medica and General Therapeutics in the Jefferson Medical College of Philadelphia, etc. Fifth Edition, Revised and Enlarged. New York: D. Appleton & Co., 1884. Pp. xxii-738.

WE have lately had occasion to notice a number of new works, and new editions of well-known text-books, on materia

medica and therapeutics, and on a great proportion of them we have bestowed high commendation. To none, however, is greater praise to be awarded than to this fifth edition of Professor Bartholow's. The appearance of the new pharmacopœia has rendered a number of changes in phraseology necessary, but, in addition to those, the volume bears evidence throughout of having been brought well up to the present state of our knowledge. With the author's happy faculty for discerning just what aspects of the subject the practitioner of medicine needs to have most prominently set forth, he has chosen the plan of subordinating theoretical and purely scientific considerations to the practical; and yet, as he himself vigorously puts it, he has not allowed "utilitarian empiricism" to overshadow the scientific discussion of therapeutical principles.

In consonance with the general voice of the profession, we must say that practitioners of medicine can scarcely afford to forego the advantages to be derived from the possession of this book.

Tabulæ Anatomicae Osteologiae. Editæ a CAROLO H. VON KLEIN, Artium Magistro, Medicinarum Doctore. Cincinnati: Cincinnati Lithographic Co., 1883.

DR. VON KLEIN's work seems to merit special commendation, not so much because it attempts anything extraordinary in the way of fine work in the cuts, but because accuracy of illustration is secured, and, above all, because the book is a notable endeavor to further the adoption of a uniform and precise Latin nomenclature—an anatomical language for use in all countries. With the exception of one or two slips, the Latin is unusually correct. We trust the author will be encouraged to extend his work into other branches than osteology.

The Pharmacopœia of the Northeastern Hospital for Children. Compiled by a Committee of the Staff. London: J. & A. Churchill, 1883. 12mo, pp. 32. [Interleaved.]

SUCH a book is commonly known among us as a formulary. The list of preparations in use at this hospital is rather more extensive than we are accustomed to see, but includes many which are tried and well known. A good feature of the book is a diet table, and two pages and a half of directions for bringing up babies.

BOOKS AND PAMPHLETS RECEIVED.

Annual Report of the Supervising Surgeon-General of the Marine-Hospital Service of the United States, for the Fiscal Year 1883. Washington: Government Printing Office, 1883. Pp. 406.

Students' Manual of Diseases of the Nose and Throat. A Digest descriptive of the more commonly seen Diseases of the Upper Air-Tract, with the Methods of their Treatment. By J. M. W. Kitchen, M. D., Assistant Surgeon to the Metropolitan Throat Hospital, etc. New York: G. P. Putnam's Sons, 1883. Pp. vi-127. [Price, \$1.]

A Classified and Descriptive Directory to the Charitable and Beneficent Societies and Institutions of the City of New York. Published for the Charity Organization Society of the City of New York. New York: G. P. Putnam's Sons, 1883. Pp. xv-169. [Price, 75c.]

On Malpositions of the Kidney. By David Newman, M. B., C. M. [Thesis, University of Glasgow.—Reprint from the "Glasgow Medical Journal."]

Report of Proceedings of the Illinois State Board of Health. Quarterly Meeting, Chicago, October 18, 19, 1883.

Forty-third Annual Announcement and Catalogue of the Missouri Medical College.

THE
NEW YORK MEDICAL JOURNAL,
A Weekly Review of Medicine.

Published by
D. APPLETON & Co.

Edited by
FRANK P. FOSTER, M. D.

NEW YORK, SATURDAY, NOV. 24, 1883.

THE ERIE COUNTY SOCIETY'S MEDICAL BILL.

THE November number of the "Buffalo Medical and Surgical Journal" publishes a letter from Dr. E. M. Moore, of Rochester, addressed to the Committee on Legislation of the Medical Society of the County of Erie, in which, speaking of the committee's proposed bill for the regulation of medical practice in the State, the text of which was given in our issue of September 22d, Dr. Moore says: "While I have an instinctive dislike of any association with outsiders, it must be confessed that the plan your committee have in hand is the only one that can insure uniformity. Moreover, it is impossible to dictate anything on the subject of therapeutics. This, perhaps, is no great calamity, if men are thoroughly informed in the other departments of medical knowledge." The Erie County society's proposed bill has also received the formal approval of the Wayne and Westchester County societies.

It will be remembered that the original draft of the bill provided for a pro rata representation of the sects in a State examining board. Subsequently a modification was adopted making the constitution of the board in the proportion of six non-sectarians, two homœopathists, and one eclectic. We have before expressed our inability to see the occasion for more than one representative from each of the sects. We think the influential men among the homœopathists and the eclectics would not oppose a bill giving one representative to each of those sections of the profession. An outcry against such a bill must be expected from a certain class of doctors—a class always ready to pose as victims to persecution; but they will oppose any reasonable bill, license being their only idea of liberty. Since their blatant opposition must be encountered in any event, is it not better to strike for a satisfactory law at the start? We are satisfied that the pro rata principle, however modified, will tempt to the very abuses it is so much desired to avoid. Dealing with sensible men, such as most of our legislators may be assumed to be, there ought to be little difficulty in showing the utter shallowness of the persecution plea.

Our purpose in quoting from Dr. Moore's letter, however, was not to renew our expressions of dissent from this particular feature of the bill, but rather to hold up the main concession of which he speaks as a concession that must be made. Not only will it not do to go before the Legislature with a proposition to exclude all representation of other "schools" than our own, but the thing would not be right even if it were feasible. We must not ask for legislation in the interest of the medical profession, but for measures in the interest of the community. We are very glad to see, therefore, that so potent a voice as Dr. Moore's is raised in favor of a mixed board.

INVERSION OF THE UTERUS.

It is to be presumed that few, if any, of our readers are unmindful of the degree to which original contributions to the advance of gynæcology have been made in our own country. The American is decidedly in his element when a mechanical problem is to be solved, and the gynæcology of the present time turns so largely on the mechanical adaptation of means to ends that our pre-eminence in that branch of the medical art is not to be wondered at, especially when we consider, too, that it was here that the interest and enthusiasm now felt in the specialty all over the civilized world practically took their rise.

Making all allowances for these considerations, however, it is not a little remarkable that there should be one particular form of injury of the uterus for the repair of which almost ever important step has been taken in this country—and that, too, an affection recognized in all its gravity from time immemorial, and not, as in the case of cervical laceration, one that was really first brought to light here. Prominent among the procedures that have taken their rise in America for the restoration of the inverted uterus to its normal state, we may mention the late Professor White's plan of effecting reduction by the action of sustained elastic pressure on the body of the organ; Dr. Emmet's method of making a partial gain pave the way to final success, by sutures passed through the cervical lips and subtending the fundus; Dr. Noeggerath's happy thought of taking advantage of the natural action of the muscular tissue by indenting first one horn and then the other; Dr. Thomas's bold and direct solution of the problem, how to dilate the cervix, by approaching the orifice from above through an abdominal incision; Dr. Watts's device for accomplishing dilatation from above without laparotomy, by carrying the fingers into the hollow of the inverted organ by way of the rectum; and, finally, the latest expedient, described in this issue of the journal, by means of which Dr. Browne has succeeded, in an obstinate case, in dilating the cervix through an incision penetrating the uterine wall.

All these procedures are rational, and each has proved successful in actual practice. They are all in the highest degree creditable to the gentlemen with whom they originated, and they are no less creditable to American medicine. It is scarcely to be supposed that the list of possible devices likely to prove available is yet exhausted, but certainly great strides have been made in that direction, and whoever brings a new expedient into play not only makes the positive achievement, if he succeeds, of swelling the record of triumphs, but often holds out to others a suggestion that is pretty sure to be followed up and made the most of.

THE BIRTH RETURNS OF NEW YORK.

WE have before alluded to the exceptionally low death-rate recorded in New York during the greater portion of the current year. It appears, even, that for several weeks past the deaths have been exceeded by the reported births—a feature somewhat novel in our vital statistics. It has been said that this was owing to an unwonted fidelity on the part of physicians in the matter of reporting births, and that it has been

brought about by the Health Department's having caused it to be understood among the profession that the penalties it was entitled by law to attach to the non-fulfillment of the requirements in such cases would now be exacted more rigorously than in the past.

Such an impression may be entertained by our city practitioners, and we hope it is. Our absolute death-rate, as reported, is undoubtedly higher in general than the facts really warrant. This anomalous state of things depends upon circumstances that space does not allow us to enumerate at present. But there is no doubt that the excess of deaths over births usually reported is due to the fact that the former are all reported, while of many of the latter no return is ever made. The Health Department is enabled to apply one practical test of the faithfulness with which births are returned, in that, when a child's death is reported, it can ascertain from its own records whether that child's birth was or was not reported; but, manifestly, this is an imperfect test, and the department would be quite warranted, as it is abundantly authorized, in enforcing the penalties prescribed for negligence in this matter. On this ground it is to be hoped that, whether as the result of some premonition to that effect, or in consequence of an awakening of our *confrères* to the duty of reporting births, the returns will in the future be more complete. As a matter of fact, however, the recent excess of births does not seem to be due so much to any such circumstance as to the remarkably low death-rate.

OUR QUARANTINE SYSTEM.

IN the volume just issued by the Treasury Department, being the Annual Report of the Supervising Surgeon-General of the Marine-Hospital Service, for the fiscal year 1883, Surgeon-General Hamilton, we are glad to see, expresses himself pointedly in favor of the value of the quarantine system. He very properly denies that there need be any antagonism between the enforcement of quarantine and other measures of marine sanitation. The fact that no great amount of harm has followed the abandonment of the practice of quarantine by the English he imputes to the remoteness of England from the great sources of infection. Doubtless it is chiefly with regard to yellow fever that this explanation is intended to apply; indeed, it is largely with respect to that disease that Dr. Hamilton's remarks on quarantine are to be taken. It is pointed out that the nations of Europe are far from approving of the English policy, as was shown by the action of Spain in establishing a temporary quarantine against all English arrivals during the past summer.

Arguing, as he does, that a national quarantine system is a necessity with the United States, and supporting his position by quite an array of illustrative incidents in our past experience, Dr. Hamilton nevertheless insists that it ought not to be of the makeshift character hitherto employed. He objects to the station at Ship Island, for example, as situated too far from the course of vessels bound for New Orleans, and suggests the Grand Gozier or one of the Chaudelour Islands as a more suitable place. Besides the greater convenience and efficiency of a

quarantine station at the latter situation, it would be less dangerous as a source of infection to vessels engaged in local trade. The establishment of a permanent station at or near Cape Charles is urged, and the opinion of the sanitary conference held at Fortress Monroe is cited as agreeing in this recommendation. It is shown that, with a comparatively small expenditure, a well-appointed station may be established there.

MINOR PARAGRAPHS.

THE BRITISH GOVERNMENT AND THE CHOLERA IN EGYPT.

PROFESSOR LANKESTER, writing in the "Pall Mall Gazette," laments the failure of his Government to take an active part in the scientific investigation of the outbreak of cholera in Egypt, all the more from the fact that Great Britain is held morally answerable for the conduct of affairs in Egypt, sanitary as well as political. He intimates, too, that England could not have furnished any investigators qualified for such a work, and would probably have assigned it to a few medical students. Herein, it seems to us, Professor Lankester does his countrymen scant justice.

A SIMPLIFIED POLYSCOPE.

DR. BARATOUX, who has contributed largely to the adaptation of electrical appliances to medicine, has devised a modification of M. Trouvé's polyscope which, in the form recently shown to the Paris Society of Biology, seems to have certain advantages over the photophore. A minute electric light is arranged in the hollow of a concave mirror, and the whole apparatus, including the handle, is but little more cumbersome than the ordinary laryngeal mirror.

THE "PLANET."

THE November number, the eleventh of the first volume, dated November 15th, comes to us much improved in appearance. The size of the page and the general typographical appearance are those of the "Medical Record." We congratulate Dr. Nelson on the success which this change seems to imply.

NEWS ITEMS.

INFECTIOUS DISEASES IN NEW YORK.—We are indebted to the Sanitary Bureau of the Health Department for the following statement of cases and deaths reported during the two weeks ending November 20, 1883:

DISEASES.	Week ending Nov. 13.		Week ending Nov. 20.	
	Cases.	Deaths.	Cases.	Deaths.
Typhus.....	1	1	0	0
Typhoid Fever.....	50	21	32	13
Scarlet Fever.....	67	8	44	9
Cerebro-spinal meningitis....	3	1	1	1
Measles.....	22	1	51	6
Diphtheria.....	43	23	39	22
Small-pox.....	0	0	1	0

EPIDEMIC DISEASES.—*Small-pox* is reported from Stone Fort, Ill., and the neighboring country.

Scarlet Fever is prevailing in Trenton, N. J., where it has been found advisable to dismiss the pupils of a large school, to prevent the spread of the disease among them.

Diphtheria is epidemic in New Brunswick, N. J., and Waterbury, Vt.

Trichiniasis has broken out in Thorn, in West Prussia.

THE INFECTIOUS DISEASES OF DOMESTIC ANIMALS.—At a convention held in Chicago on the 15th inst., at the call of the

Commissioner of Agriculture, papers were read by Professor Law, of Cornell University, Dr. Salmon, of the Department of Agriculture, Dr. Parsons, of Wyoming, Dr. Gadsden, of Pennsylvania, and others. The convention was largely attended. Congressional legislation in regard to contagious pleuro-pneumonia was favored, also a Government inspection of meat for export. An extension of quarantine, so as to cover sheep, swine, and goats, was favored.

RINDERPEST is reported by our consul at Breslau to have broken out in that city.

THE LATE DR. J. MARION SIMS.—At a special meeting of the Board of Governors of the Woman's Hospital in the State of New York, held at the house of the president, on the evening of November 15th, the following minute was adopted:

The sudden death of Dr. J. Marion Sims, on the 13th inst., is recognized as a grievous loss by all who are interested in the cause of humanity, and especially by those associated with him in this charity. From the day of its organization until his departure for Europe in 1861 he was its only surgeon, and practically developed there the improved methods of operating which he had originated, notably the use of the silver suture, now found to be indispensable. During thirty years of his active life he devoted his talent, time, and influence to place this institution upon a successful basis, and earned the gratitude of the many suffering women who have been relieved. After his return from that visit to Europe he was elected a member of this board, and served with his wonted interest. When the Board of Surgeons was reorganized, to consist of four members, he accepted one of the newly created positions and resumed active professional practice in the institution.

After resigning that position he became one of the Committee of Surgeons, at the unanimous request of his colleagues and of this board. At intervals, when in Europe, he treated many important cases, and was equally appreciated in both continents. But his memory will be especially identified with this institution, where his reputation as one of the most eminent surgeons of the century was first developed.

Resolved, That the members of this board will attend the funeral of the deceased.

On the occasion of the twenty-ninth anniversary of the hospital, on Thursday, the 22d inst., one of the Lady Supervisors presented the institution with a bronze bust of Dr. Sims.

AN ARREST UNDER THE MEDICAL PRACTICE ACT.—“Dr.” Thomas F. Blanchard, representing himself as a lung specialist, doing business at 911 Arch Street, Philadelphia, and also Medical Director of the “Germantown Sanitarium and Home for Consumptives” at Germantown, Pa., recently went to Glens Falls, N. Y., and opened an office at one of the hotels. He registered in the County Clerk's Office as practicing under a diploma granted by the Geneva Medical College, New York, dated June 3, 1849, and also a diploma granted by the Royal College of Surgeons, London, dated March 20, 1853. As both these dates occurred on *Sunday*, the “doctor” was arrested under the Medical Practice Act. He asked for a postponement to give him time to produce his diplomas, and, while the preliminaries for bail were being arranged, he escaped from the officer and disappeared.

THE HOSPITAL SATURDAY AND SUNDAY ASSOCIATION.—It is announced that two hundred and ninety-three churches have agreed to take part in the collection this year. The Skin and Cancer Hospital has been admitted to the association.

THE NEW YORK INFANT ASYLUM.—The Grand Jury has failed to find an indictment against Dr. Caroline G. Marr, the resident physician of the country branch, who was recently censured by a coroner's jury.

OBITUARY NOTES.

JOHN LAURENCE LE CONTE, M. D., OF PHILADELPHIA, died on Thursday, the 15th inst., at the age of fifty-eight. He was born in New York, May 13, 1825, graduated from Mount St. Mary's College in 1842, and received his medical degree from the College of Physicians and Surgeons in 1846. In 1852 he removed to Philadelphia, where he has since resided. In 1857 he was attached to a party sent out to make a survey for an interoceanic railway across Honduras, and in 1867 he accompanied a surveying party on the Kansas Pacific extension. He entered the volunteer army as surgeon in 1861, and was subsequently appointed medical inspector with the rank of lieutenant-colonel, and served in this capacity until the close of the war. He was a member of and held office in many of the leading scientific societies in this country, and was also a member of a number of scientific bodies abroad. He was for many years a voluminous contributor to periodicals and to the transactions of these societies, his writings being principally on entomology, in which subject he was particularly well versed. At the time of his death he was chief clerk in the United States Mint at Philadelphia, a position which he had held for several years.

SIMEON P. DRESSER, M. D., OF HINSDALE, MASS., died suddenly on the morning of Thursday, the 15th inst., at the age of forty-three. Responding to an urgent call at four o'clock in the morning, he drove against an obstruction, was thrown from his carriage, and broke his neck. He was a member of the Massachusetts Medical Society and of the Berkshire District Medical Society.

Letters to the Editor.

THE NEW YORK INFANT ASYLUM.

NEW YORK, November 12, 1883.

To the Editor of the New York Medical Journal:

SIR: I furnish you for publication extracts from the minutes of the Executive Committee of the New York Infant Asylum, which will correct errors that have occurred in the statement published by Dr. Joel Foster and others in your journal.

Very respectfully yours,

RICHARD B. KIMBALL,
Secretary, Board of Managers.

A meeting of the Executive Committee of the New York Infant Asylum was held, pursuant to call, on the evening of September 29, 1883, at the residence of L. M. Bates, Esq., at eight o'clock. Present: L. M. Bates, Dr. Joel Foster, Dr. William N. Blakeman, Archibald Turner, and Benjamin A. Willis.

L. M. Bates presided.

Benjamin A. Willis, being elected secretary *pro tempore*, acted as such.

The meeting having been called to order, the president stated that an epidemic was prevailing in the Mount Vernon Home—to consider which was the object of the meeting.

Dr. Joel Foster then made a statement to the effect that since the 1st of August last an epidemic of a fatal character had raged, resulting in fifty-one deaths, appearing in measles of a malignant form, different from any known to him in his experience—of an obscure character, recurring twice, three, four, and five times in the same patient, the sequelae of which were most dangerous, being bronchial pneumonia, dysentery, and in other forms; the measles were attended with symptoms similar to scarlatina.

A meeting of the Executive Committee of the New York Infant Asylum was held, pursuant to call, on the sixth day of October, 1883, at the office of L. M. Bates, No. 345 Broadway, at 3 o'clock, p. m.

Present: Messrs. Bell, Bates, Foster, Willis, Turner, and Kimball.

Dr. Foster submitted the report of the sub-committee, appointed September 29, 1883, Messrs. Foster, Burrall, and Goodridge, which was read by the secretary and ordered placed on file.

Colonel B. A. Willis moved, which was seconded, that this report of the sub-committee, the letter of September 29, 1883, signed by Messrs. Foster, Blakeman, Burrall, Goodridge, and Nicoll, with the subject-matter thereof, be referred to the Executive Committee of the Medical Board, who report thereon to this board with all convenient speed. After discussion, this was adopted; ayes, Bell, Bates, Kimball, Turner, and Willis.

At a meeting of the Executive Committee of the New York Infant Asylum, held, pursuant to the call of the chairman, at 3.30 o'clock, P. M., at No. 55 Liberty Street, on Tuesday, October 30, 1883.

Present: The chairman, L. M. Bates, and Messrs. Clark Bell, Dr. William N. Blakeman, Dr. Joel Foster, Archibald Turner, and B. A. Willis.

The president, Mr. Bell, then laid before the committee a communication from the visiting staff to the board, certifying to the competency of Dr. Marr, of which the following is a copy, dated October 16, 1883:

To the Board of Managers of the New York Infant Asylum:

We, the undersigned, visiting physicians of the Mount Vernon branch of your institution, hereby desire to testify our faith in the competency of the resident physician, Dr. Caroline G. Marr, her zeal and energy under trying conditions, and at the same time wish to give it as our opinion that the mortality of the epidemic of measles, whooping cough, and diphtheria, and their complications which have prevailed, under the circumstances, is not excessive.

A. N. BELL, M. D.,
GEORGE B. FOWLER, M. D.,
E. BRADLEY, M. D.,
F. N. WARNER, M. D.

October 16, 1883.

On motion, the communication was received and ordered placed on file.

The Executive Committee of the Medical Board, to whom were referred the communication of Dr. Foster and others, and the report of the sub-committee made to the committee October 6, 1883, made the following report:

NEW YORK, October 30, 1883.

To the Executive Committee, Board of Managers, New York Infant Asylum:

GENTLEMEN: The undersigned, members of the Executive Committee of the Medical Board of the New York Infant Asylum, have considered the communication of September 29, 1883, and the report of the sub-committee of October 6, 1883, referred to our committee, and respectfully report: "That we recognize no necessity for other medical service than that of the Medical Board so distinctly provided for in your own by-laws."

Respectfully yours,

A. N. BELL,
J. C. THOMAS,
GEORGE B. FOWLER.

The report was received, read, and ordered placed on file.

Attached is a letter of September 29, 1883, as follows:

GENTLEMEN: We all alike deplore the calamity which has befallen our Country Home at Mount Vernon. The epidemic which began during the month of August has already destroyed fifty lives, and during the past ten days fourteen deaths have occurred; which shows that the violence of the disease has not abated.

Evidently the means hitherto used are inadequate to control the disease. In this emergency we offer our united services to the asylum, requesting that full control of the medical and sanitary interests of the Country Home be delegated to us until the epidemic is ended.

(Signed) JOEL FOSTER, M. D.,
W. N. BLAKEMAN, M. D.,
E. A. GOODRIDGE, M. D.,
F. A. BURRALL, M. D.,
HENRY D. NICOLL, M. D.

NEW YORK, September 29, 1883.

THE COLUMBIA VETERINARY COLLEGE LECTURES.

2 EAST THIRTY-THIRD STREET, N. Y., November 17, 1883.

To the Editor of the New York Medical Journal:

SIR: In the journal of to-day attention is called to a course of lectures now in progress at the Columbia Veterinary College, in which is announced a lecture by myself on "The History of Surgery." I would like to have it known that this announcement has been made without authority from me, and even after my positive refusal to deliver any lecture, and I respectfully ask the use of your columns for that purpose.

Your obedient servant, WILLIAM T. BULL, M. D.

Proceedings of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

A STATED meeting was held November 14, 1883, Dr. G. F. SHRADY, President, in the chair.

A TOOTH REMOVED FROM THE ANTRUM OF HIGHMORE.—Dr. J. A. WYETH presented the specimen, which was removed from a woman, twenty-six years of age, who came to him a year ago with trouble with the antrum of Highmore on the left side. Thirteen years previously she had measles or scarlet fever, and since then, from time to time, had felt painful sensations in the antrum. A dentist extracted a tooth on the corresponding side, and, through the hole left by one of the fangs, pus escaped more or less for seven or eight years afterward. Dr. Wyeth extracted two more teeth, and trephined the antrum for the purpose of through-drainage. On opening the antrum, he found a tooth, which was evidently one of the permanent teeth that had taken a wrong direction, entered the antrum, and acted as a foreign body. It was the only case of the kind which he had seen or heard of. The symptoms had not entirely disappeared, which would seem to indicate the presence of necrosed bone that would have to be removed at a future time.

Dr. G. L. PEABODY thought such cases must be very rare.

EMBOLISM OF THE BASILAR ARTERY.—Dr. PEABODY presented a portion of the base of the brain and the heart of a man who entered the hospital last spring. His mother had died of heart disease. Two years ago he had suffered from rheumatism. Ten weeks before entering the hospital he began to suffer from symptoms which might be attributed to disease of the heart and kidneys, which were present: dyspnoea, palpitation, headache, and anasarca in greater or less degree, as the case progressed. Some hours before death he became very silly, without any apparent reason for it; the heart's action became more irregular, and incontinence of the faeces and urine took place. The anasarca became excessive. He then grew violent, and it was necessary to put him into a strait-jacket. Nourishment had to be administered by the stomach-tube. The amount of urine decreased to fourteen ounces in the twenty-four hours. In the evening he became quiet, and passed into a state of stupor and died. At the autopsy the basilar artery was found completely occluded by an embolus, which had cut off all circulation to the portion of the brain supplied through that channel; in other respects the brain was normal. The heart was large, both ventricles markedly dilated, with signs of general endocarditis, the chief lesions resting in the mitral valve, the cusps of which were markedly thickened and stiffened, the surfaces being rough. There were signs of acute pleurisy just over the site of a pulmonary hæmorrhagic infarction. The kidneys were the seat of extensive lesions. The liver was enlarged. The parietal and the visceral layers of the pericardium were adherent. The chief

interest in the case related to embolism of the basilar artery, which Dr. Peabody regarded as a rare condition. It seemed strange that the embolus had not become lodged before reaching this position. The accident probably occurred at about the time the man became delirious. It was not difficult to understand that the nutrition of the brain had not suffered much, considering the extensive anastomosis in this region.

Dr. WYETH asked Dr. Peabody what he considered the immediate cause of death.

Dr. PEABODY replied that the question was a difficult one to answer, inasmuch as there were so many conditions present, any one of which might have caused the fatal issue; the heart lesion, however, was in some way the probable cause.

Dr. WYETH said that he had been personally cognizant of two cases in which thrombosis of the basilar artery had been considered the cause of death, the explanation being, it was supposed, that anæmia of the medulla and pons had resulted. Other cases had also been reported. Eight years ago he proposed to tie both vertebral arteries in a case of epilepsy, miliary aneurysm then being considered a probable cause of the disease; but about that time one of the two patients referred to died, as was supposed, of anæmia of the parts supplied by the basilar artery, which was the seat of thrombus. As it seemed that the condition which he was about intentionally to produce had in this case accidentally occurred and resulted in death of the patient, he decided not to perform the operation. A Liverpool surgeon, however, had tied the vertebral artery in a number of cases of epilepsy, in some of which a cure seemed to have been effected. In others there had been improvement, and in none had any evil result occurred attributable to the operation.

IVORY EXOSTOSIS OF THE ETHMOID.—Dr. HERMANN KNAPP presented a specimen which had been removed from a woman forty-five years of age, who died about four days after the operation. The patient had suffered from nasal polypi for about fifteen years. Twelve years ago they had been removed for the first time. In the course of years four more such operations had been performed, the last one two years ago. They then grew much faster, and six weeks ago, when she went to Dr. Knapp, both nostrils were occupied by polypi, one of them being almost completely occluded. At the inner side of the orbit there was a hard tumor, about as large as a filbert, crowding the eye toward the temple and somewhat forward. He advised removal of the polypi as far as possible through the anterior nares, and Dr. Lincoln performed the operation, extending it over four or five weeks. A considerable mass of the growths was removed, and Dr. Lincoln said he could not go farther. Dr. Knapp concluded to remove the bony tumor, after which better access could be had to the polypi. No difficulty was experienced in the removal of the tumor; it was extracted with so little injury to the tissues that not the slightest apprehension of unfavorable reaction was entertained. The nasal cavity was then explored as far as possible through the nostril with a sharp spoon. The frontal sinus on that side was found full of polypi, which were removed. They were the ordinary so-called mucoid polypi. The patient did well during the first twenty-four hours, and then began to complain of headache, and became somnolent. The temperature rose to about 104.5° F., and she died on the fourth day, comatose. At the autopsy the dura on the right side, especially along the larger vessels, was completely infiltrated with pus; the meshes of the pia and the space beneath were filled with serum; the cerebral convolutions were considerably flattened. On the left side, on which the operation had been performed, the purulent infiltration was much less marked, and still less at the base of the brain. No direct transmission of the inflammatory process from without inward was traced. There was no irritation at the seat of removal of

the tumor. The ethmoidal cells on both sides were almost completely plugged with polypi. There were also polypi in the frontal sinus at points which it was impossible to reach during life. The sphenoidal cells were plugged with polypi, and at one point contained cheesy pus, which doubtless had existed at the time of the operation, and was one of the prime factors in exciting the fatal meningitis. The tumor had developed from the ethmoid bone, and was of ivory-like hardness. The method of removal was certainly the correct one, and, doubtless, the fatal result was not due to the operation, the way having been previously prepared by the polypoid growths and the purulent accumulation of which they had been the cause; but the operation might have had some influence in fanning the flame that already existed. As to the necessity of treating polypoid growths there could be no doubt. Dr. Knapp had seen cases in which, by neglect, they had extended to the ethmoidal cells and the frontal sinuses, crowding upon the bones of the orbit, and leading to a condition which no human hand could remedy. In one instance they had been operated upon sixteen times, and at last become sarcomatous in character. Their presence in the cells of the bones caused retention of the secretions, and was liable to lead to the condition more frequently seen in the mastoid cells, which, sooner or later, led to abscess, thrombosis, meningitis, etc. They should be dealt with early. The same was true of exostoses of the orbit; while small they could be removed with success.

HYDATID MOLE.—Dr. CHARLES HEITZMANN presented a specimen which had been passed at the fifth month of pregnancy, small masses having been first passed at the commencement of the fourth month. He presented it for the purpose of referring to its minute structure, and agreed with the opinion as to its true nature entertained by Virchow.

CARCINOMA OF THE BREAST.—Dr. A. G. GERSTER presented a breast and some of the axillary glands removed from a woman, sixty-one years of age, who had given birth to nine children. She came to the German Dispensary in May last, on account of a slight discharge of blood from one nipple. The most careful examination failed to reveal any induration of the shrunken gland, or of the axillary glands. Nevertheless, Dr. Gerster had suspicions of cancer, and, as the woman did not wish to have the breast amputated at that time, she was advised to return from time to time, that the progress of the condition might be watched. The physicians at the dispensary said, on his return in the autumn, that there had been no change in the condition. Dr. Gerster, however, examined the axilla carefully, and found induration of the glands, and then no longer entertained doubts as to the nature of the disease. The breast, together with the affected axillary glands, was amputated for carcinoma. This was the third case which he had seen in which induration of the lymphatics in the axillary space pointed plainly to malignant disease while the only condition observable in the breast was a slight sore at the nipple. He called attention to the difficulty of discovering enlargement of the glands in the axilla when it was not considerable.

AMPUTATION AT THE THIGH FOR KNEE-JOINT AND PILEGMONOUS INFLAMMATION.—Dr. GERSTER also presented the leg of a child, which had been amputated on account of the presence of a complicated pathological condition. The patient had had strumous disease of the knee joint for a considerable time; it was suddenly taken with fever, and was seen by a physician, who took the trouble to be rheumatism, and poulticed the joint. Pilegmonous inflammation was thereby superimposed upon the strumous affection, and extended well up on the upper third of the thigh. The parents, who regarded the child's condition as comparatively good, were surprised to hear amputation proposed. The suppuration was very extensive, and it was neces-

sary, in order to get a sufficient amount of flap, to employ some of the affected integument. A strong solution of the bichloride of mercury, 1 to 500, was used. The wound healed by first intention, and the patient made a good recovery.

Referring to the first case, Dr. W. GILL WYLIE said that in one instance he was led to suspect implication of the axillary glands from tenderness; an increase in size could not be determined by the feel. His suspicion was correct, as the operation proved.

Dr. HEITZMANN asked Dr. Gerster if he meant to state that the use of the strong bichloride solution had been the means of bringing about the good result in the second case.

Dr. GERSTER replied in the affirmative. In no other way than by insuring the destruction of germs could primary union have been obtained in the phlegmonous tissue. Simple cleanliness would not have produced the result.

CANCER OF THE OESOPHAGUS.—Dr. E. K. HENSCHEL presented a specimen, obtained from a man seventy-three years of age. The patient first came under his observation in April, 1881, when he complained of eructations of gas and disturbance of the stomach, the symptoms not being marked. The next time he saw the patient was in March, 1882, when he had some difficulty in swallowing solids, but examination disclosed nothing positive. He consulted physicians in Paris and Brazil, while in those places, still complaining of eructations. In September, 1882, there was some dullness at the right of the sternum. At the beginning of the present year he began to lose flesh, the dullness to the right of the sternum increased, and respiration near that point was absent; he could at last take only fluids, and these were more or less regurgitated. Dr. Janeway saw the patient with him, at which time he had lost seventy pounds in weight. After passing a bougie, two large clots of blood were spat up, and the man then improved somewhat, gaining twenty-five pounds. In October, pleurisy over the lower right lobe developed, but improved until, on November 4th, bronchitis with expectoration appeared, and on the 5th a gurgling, as if of breaking down of lung tissue, was heard about the middle lobe on the same side. On the following day there were indications all over the chest of fluid exudation. The man became unconscious, and expired some thirty-six hours later. The post mortem revealed stricture of the oesophagus by carcinoma. An opening had taken place at the center of the ulcer into the right lung. The pleural cavity was filled with a fluid which gave forth an odor as if it had come from the stomach.

Dr. PEABODY remarked that this specimen, which he had examined, was interesting because of the perforation which had taken place into the lung, through which the contents of the stomach had entered by regurgitation and had partly digested the tissues with which they had come in contact.

A VERY LARGE HEART.—Dr. BEVERLEY ROBINSON presented two hearts, only one of which he was at liberty to publish the history of. The patient was a man of large build, being six feet and about five inches tall. He was a laborer, and had been a free drinker; for four or five years he had suffered from cardiac palpitation, dyspnoea, and insomnia. He was treated by caffeine, digitalis, convallaria, etc., and by counter-irritation over the chest, which gave some relief. Some fluid was withdrawn from the pleural cavity on two occasions, after which the lungs expanded for a time. Afterward the breathing again became very difficult, the jugular veins were distended and throbbing, and it was decided to perform venesection. Fifteen ounces were withdrawn from the arm, the first eight of which were of a dark color, the latter part more normal in appearance. The relief was very great, and took place immediately; the engorged veins were no longer visible, but the relief proved only of short duration. The dullness over the præcordial region, which had

been present, extended, dyspnoea increased, and the man grew delirious and died. The heart was found to weigh 55 ounces. The largest which he had found on record weighed 46.5 ounces.

The PRESIDENT said that Dr. Clark had presented a heart at the society which weighed, if he remembered correctly, as much as 57 ounces.

TYPHOID PERFORATION OF INTESTINE.—Dr. ROBINSON also presented this specimen, which had been obtained from a patient who died in a relapse of typhoid fever. The case had been of some interest because of the irregular course of the fever. Just before death the temperature dropped suddenly to 96.6°, probably at the time when perforation took place. The intestine was found perforated at two separate places.

Dr. FERGUSON presented specimens obtained from a man in whom, at the autopsy, there were found hypertrophy with dilatation of the walls of the heart, the visceral and the parietal layers of the pericardium being covered with fibrin, brown induration of the lungs, congestion of the stomach and intestines, and the lesions of Bright's disease in the kidneys. The man had been addicted to the use of beer and whisky, was unmarried, twenty-five years of age, and had suffered from rheumatism; before death he had headache, dyspnoea, orthopnoea, etc. He died delirious.

DISSECTING METRITIS.—Dr. GARRIGUES presented two specimens illustrating this affection, forming the last of a series of eight cases which had now come under his observation. The seventh specimen was obtained from a woman confined at the Maternity Hospital, in March last, with her third child. The head was extracted with the forceps. On the following day there was somewhat increased temperature. Intra-uterine injections of a two-per-cent. solution of carbolic acid were employed, together with vaginal irrigation. Quinine and salicylate of sodium were administered. Diphtheritic ulcers appeared at the seat of a slight laceration of the perinæum, and a suspicious spot was recognized on the anterior lip of the cervix, which was cantharized, and the carbolic solution was used. The next day the patient was delirious. Boric acid, ice-bag, etc., constituted the further treatment. A piece of flesh, about seven by two centimetres, was discharged, which proved to be a piece of the lining muscle of the uterus. After the expulsion of the mass the patient made a rapid recovery. The eighth case was that of a woman twenty-three years of age, a primipara, who was delivered September 15, 1883, the labor being normal. There was a slight rupture of the perinæum, which was touched with the tincture of iodine. The vagina was syringed with a one-and-a-half-per-cent. solution of carbolic acid. The next day the patient complained of pain in the abdomen, the lochia were profuse, the temperature was slightly elevated, and the uterus did not contract properly, and was sensitive to pressure. On the 16th of October she sat up for the first time; a pear-shaped body, about seven by four centimetres, was discharged, doubled upon itself, and found, as in the other case, to be composed of uterine muscular tissue—single fibers undergoing fatty degeneration, interspersed with small round cells, the sinuses being filled with fibrin. Besides the eight cases which he had observed, Dr. Garrigues had been able to find but two in literature.

MEASLES COMPLICATED WITH CAPILLARY BRONCHITIS.—Dr. J. LEWIS SMITH presented a specimen, removed from a child which died in its fifth year. It had measles, which progressed favorably, but afterward laryngeal symptoms developed, breathing became obstructed, and the patient sank and died. Although the voice had been lost, no pseudo-membrane existed; there was intense laryngeal and tracheal congestion, extending also down into the bronchial capillaries. When this complication occurred with measles, the cases proved as fatal as those of scarlet fever.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

A STATED meeting was held November 1, 1883, the President, Dr. R. A. CLEEMAN, in the chair.

Dr. B. F. BAER related the following cases:

FORCEPS LABOR, FIFTH POSITION.—On October 17th I was requested by Dr. ——— to visit his patient, Mrs. H., who had been in labor thirty-six hours, prepared to perform craniotomy. She was a primipara, forty-three years of age. I found the patient nervous and exhausted, the soft parts dry and rigid, the os only partially dilated and the membranes ruptured many hours. The head, a large one, was in the cavity of the pelvis, and, while not impacted, it was nearly so. The larger portion of the head was posterior and to the left, the smaller portion anterior and to the right. The foetal heart-sounds were heard in the left lumbar region and nowhere else. I therefore diagnosed a left occipito-posterior, or fifth position of Baudelocque. I placed a vectis, and endeavored to assist rotation forward, but failed to make any impression. I next adjusted, with some difficulty, Simpson's forceps, and, by traction during uterine action, with gentle efforts at rotation, allowing the forceps to turn as the occiput rotated anteriorly, that process was finally accomplished in about two hours of hard work. I now removed the blades, and, after finding that the head could not be extracted without it, I readjusted the instrument and assisted in extension of the head, extracting a living child said to have weighed twelve pounds. There was no laceration of the perinaeum. Both mother and child have done well. The case is interesting because of the age of the primiparous patient, and in the position of the occiput, which is rare.

ARM PRESENTATION; PODALIC VERSION.—On October 23d Dr. ——— requested me to see a patient with him, a girl sixteen years of age—a primipara at full term—in labor about twenty-four hours, the trunk presenting. In general appearance she resembled more a child of twelve than a girl of sixteen. The external genitals and vagina were small and undeveloped. The abdomen was greatly distended, globular, and fluctuating. Palpation was of only negative diagnostic value, probably on account of the large quantity of amniotic fluid. But I thought I detected the head in one iliac fossa and the breech in the other. Auscultation revealed the foetal heart-sounds, feebly heard in the right iliac region. The upper portion of the vagina was distended by a large, protruding "bag-of-waters," and the os uteri was fully dilated. I could only slightly touch the presenting part, which was entirely above the superior strait. I detected what I thought to be a limb, and, from what I had learned previously by inspection, palpation, and auscultation of the abdomen, I believed it to be an arm. I then dilated the orifice of the vagina preparatory to passing my hand, should that be found necessary after rupture of the membranes, which I now did, and found a shoulder presenting and an arm on the verge of passing the os. This I arrested, and made version by the feet. I preferred this to version by the vertex, because I deemed it easier and less dangerous to both mother and child to effect delivery in that manner than to apply the forceps in this special case. The child was alive, but feeble. The body passed through the narrow vagina very slowly, and only after pressure on the fundus of the uterus, until the head reached the floor of the pelvis. Here, by assistance, the occiput rotated forward and the head was arrested. Flexion of the head could not be made to occur by supra-pubic pressure, and by pressure upon the nape of the neck, while a finger or two acted upon the anterior surface of the head through the rectum. I then quickly adjusted the forceps, and, carrying the handles forward with the body of the foetus, made flexion and extracted a living child. There was not the slightest laceration of the perinaeum. The uterus

did not contract well; and, although ergot was administered, and time given for the organ to recover its tonicity (thorough kneading being used meanwhile), when the placenta was expelled a smart post-partum hæmorrhage followed. This was easily controlled by the application of pure vinegar to the cavity of the uterus, injected by means of the long-nozzled uterine syringe, which holds about half an ounce. I prefer this method of introducing the vinegar to any other, for the reason that it is more easily and thoroughly applied. I carry the nozzle, guided by the index-finger, as in the introduction of the sound, into the uterine cavity, and project the vinegar, without force, over the surface. This can be repeated if necessary, which is seldom. Too much praise can not be accorded Professor Penrose for his earnest advocacy of the use of vinegar in the treatment of post-partum hæmorrhage the result of uterine inertia. In my experience, it has always secured firm and continuous contraction, when properly applied. It is simple, antiseptic, and harmless.

ARM PRESENTATION; PODALIC VERSION.—October 29th Dr. ——— sent for me, stating that he had a case of shoulder presentation, the membranes being ruptured, and the os only partially dilated. He had attempted to perform version by the feet, and had brought down an arm in mistake for a foot. I found a primipara, aged twenty-two years, illegitimately pregnant, at full term, feverish and excited. A large, fat right arm occupied the vagina, and the shoulder was jammed into and projecting through the os, which was firmly contracted around it. It was a dorso-posterior position, and the head was in the right iliac fossa. All the liquor amnii had been drained away, and the uterus was closed tightly around the child, which was apparently dead. We administered ether, and I at once began an effort to bring down a foot, deciding that version by the vertex here could not be done, because the arm could not be returned to the uterine cavity, and, even if the arm had not been down, I feel sure that the bipolar force would not have been great enough to bring that head to the superior strait. But to get through the narrow vagina and rigid os, which were filled already by the arm and shoulder, was one problem, and another, apparently greater one, was the turning of the large child in a contracted uterus. An attempt was, however, not only justifiable, but obligatory, for the sake of the child, of whose death we were not sure. Then embryotomy, in a case of this character, would, I believe, have been attended with greater danger to the mother than version. I gradually inserted my hand and carried it into the uterine cavity, and with it I tried again to replace the arm, but failed. My hand was now so benumbed that almost all sensibility was lost. However, I finally reached the feet, selected the uppermost or left one, and began my efforts at version, assisting all my internal manipulations, of course, by placing the external hand on the abdomen, and acting with it on the opposite pole of the child. When I made traction on the leg, the arm advanced farther into the vagina, and it now seemed that I should certainly be compelled to give it up, the difficulties appeared so great. But patience and perseverance are cardinal virtues here, and, by exercising them to my utmost capacity, I succeeded in getting the foot and leg into the vagina, where I secured them with a fillet. I now gave this to Dr. ———, and, while he made traction upon it, I pushed upon the shoulder, and succeeded finally in revolving the child on its long axis, causing the arm to ascend and the leg to occupy its place in the vagina. The remainder of the delivery was that of a difficult breech case, where traction on the child and pressure upon the fundus of the uterus are imperative. The child was dead. The mother reacted well, and has not presented an untoward symptom. There was slight laceration in the sulci on either side of the vagina, not through the cutaneous surface, and not enough to require suturing.

BREECH PRESENTATION.—Twenty-four hours later, on October 30th, my friend Dr. W. L. Taylor requested me to see with him Mrs. X., a primipara, thirty-five years of age, who had been in labor twenty-four hours, the breech presenting in the left sacro-posterior position. The membranes had ruptured twelve hours previously, the os was rigid and only slightly dilated, and the breech was impacted in the superior strait, which seemed to be narrow. The patient was short of stature, fat, and had a small vagina. It was thought that the child was dead, but of this we were not sure. Was there any use in waiting longer for nature to effect delivery? We decided that there was not, and, I believe, correctly. An attempt at traction was made by acting on the thigh, but it was futile. I passed my hand with great difficulty into the cavity of the uterus, which closely surrounded the child, and endeavored to reach a foot, but found that the legs were extended, and it was only after I had advanced my hand absolutely to the fundus of the uterus that I secured the desired member. The uterine cavity was now so rigid and full that it appeared impossible to flex the leg and extend the thigh. But here perseverance again succeeded, and the leg was brought into the vagina. Delivery was finally consummated by the greatest effort. The child was dead, and, from appearances, had been so for some hours, as Dr. Taylor had suspected. The mother recovered as after an ordinary labor.

PUERPERAL CONVULSIONS.—A few days before, October 21st, there entered my service at the Maternity Hospital a girl, eighteen years of age, illegitimately pregnant, and near term. She presented a depressed appearance, and was pale and puffy from oedema. Her urine was examined at once, and found to contain a large quantity of albumin and some casts. Her labia minora were so oedematous that she walked with difficulty. She was placed upon a treatment consisting of Basham's mixture, digitalis, laxatives, and warm baths, with good food. On the 20th the nymphæ were so greatly distended that I feared obstruction to delivery, which was about to take place; I therefore made about a dozen small punctures over their surfaces. This was followed by a very free discharge of serum, so that in the evening the labia were reduced more than one half. During the night labor occurred, and she was delivered naturally at 7 A. M. on the 21st, having been attended by my assistant, Dr. J. P. Pyle. There were no symptoms during the labor nor immediately after it to attract attention, but before leaving her he administered thirty grains of the bromide of potassium as a safeguard. At 9 o'clock he was hurriedly called, and found her just recovering from a convulsion. He at once sent for me, and began the administration of chloroform. But before I reached her, at 10 o'clock, she had had two more seizures, and just as I entered the room she went into another, which was one of the most terrific convulsions I have ever witnessed. I immediately opened a vein and allowed about sixteen ounces of blood to flow. I will confess that I did not want to take blood from this patient, because she was in such an apparently low condition. The bleeding did not seem to have the slightest effect, for very soon after it she had another convulsion fully as severe as the one preceding. Since the first attack there had been given, *per rectum*, twenty grains of the hydrate of chloral and forty grains of the bromide of potassium, and, *per os*, one fourth of a grain of elaterium. But the convulsions continued to recur, unless the patient was kept constantly under chloroform, and coma was deepening with each attack. I now injected, hypodermically, three fourths of a grain of the sulphate of morphine. This was at 11.30 A. M. She did not have another convulsion, although no more chloroform was administered until 2 P. M. At this time she had a slight one, and at 2.30 another much more severe, when I repeated the dose of three fourths of a grain of morphine. After this she had no more convulsions. The dose

of elaterium was now repeated, and the kidneys stimulated by large doses of saline diuretics, administered by the rectum. The bowels moved freely and repeatedly soon after the last dose of elaterium was given, and the kidneys responded promptly; but the urine became nearly solid, when the test for albumin was applied, and casts were so numerous, and of such a character, that an unfavorable prognosis was pronounced by the competent microscopist who made the examination. The patient, however, came gradually out of the profound coma, but did not recover consciousness until nearly three days had elapsed, becoming at times wildly delirious and maniacal. As soon as she could swallow I resumed the administration of Basham's mixture and digitalis, and on the next day added quinine and ergot, the latter especially to restore tone to the capillaries, and thus assist in improving the condition of the brain. Milk and beef-tea were given largely. The patient will leave the hospital to-morrow, although her urine still contains albumin in considerable quantity.

If uræmia is ever the cause of eclampsia (which is not settled), this case presented the kidney state which is usually found in cases said to be of that origin. Since it is *apropos*, I will relate a case which was probably not of uræmic origin, because the urine did not indicate the slightest disease of the kidneys.

My friend, Dr. J. B. Deaver, asked me to assist him in the delivery and treatment of a case of convulsions. The patient was eighteen years of age—a primipara, and unmarried. The occiput was posterior and in the hollow of the sacrum. The first convulsion occurred after the head had passed the superior strait, and it was a very severe one. Dr. Deaver immediately bled, and very freely. Another convulsion occurred soon after the bleeding, although chloroform was administered and chloral given by the mouth. When I reached her she had had three attacks, and was profoundly under the influence of the anæsthetic, and, of course, could not convulse in that state. I adjusted the forceps and delivered with the occiput posteriorly, being unable to rotate it anteriorly. The anæsthetic was now removed, and not long after another violent convulsion occurred. I now injected two thirds of a grain of morphine under the skin. She did not have another seizure, and made an uninterrupted recovery. As stated above, there was not the slightest evidence of disease of the kidneys, either before or after labor. The cause here was reflex, the patient being predisposed by a depressed mental condition, etc.

The first indication to be met in the treatment of puerperal eclampsia should be to control the convulsions. I do not think it will be gainsaid that the prognosis becomes less favorable with each recurrence. I believe that morphine, administered hypodermically in a large dose, and repeated, if necessary, is one of the most efficient, if not the most efficient, means which we possess for that purpose. In the next case which I am called to treat I shall give one grain. I will bleed, if I think it is indicated, and shall use chloroform; but I will certainly give the morphine. I will then attend to elimination through the bowels, kidneys, and skin. Dr. Clark, of Oswego, N. Y., first brought the morphine treatment before the profession in a fearless and excellent paper, published in the "American Journal of Obstetrics" for January, 1880, which is worthy of study.

Dr. ELLIOTT RICHARDSON thought the extent of dilatation of the cervix a very important point in considering the advisability of version in shoulder presentations. When the fœtus was in a transverse position it could not descend, and, as the cervix dilated, it would slip upward on the neck and chest of the child, and thus put the vagina in a condition of longitudinal tension, and, consequently, of narrowing. Any sudden or extreme attempt at dilatation of the vagina, when in this condition, in-

volved a great risk of laceration. In Dr. Baer's case the narrowness of the os uteri was a favorable circumstance for podalic version.

There was a wide difference in the treatment of puerperal convulsions between this country and Germany. Carl Braun strongly discountenanced bleeding, and recommended chloroform, with the administration of benzoic and nitric acids, to assist the action of the kidneys. He considered that the prime object was to put the body at rest.

Dr. W. T. TAYLOR thought that in the second case, if the method of Dr. Wright, of Cincinnati, for the correction of the shoulder presentation by converting it into a vertex had been tried, the difficulties and dangers of a version by the feet might have been avoided.

He did not think bleeding should ever be omitted in the treatment of puerperal convulsions in plethoric patients. Bleed freely, and give chloral in large doses by the rectum. He thought the use of opium should be preceded by bleeding.

Dr. ALFRED WHELEN had tried one fourth grain of nitrate of pilocarpine hypodermically after bleeding, the result being successful. The use of the pilocarpine did not seem to be followed by serous effusion. In one case in which no treatment of any kind had been used an autopsy showed all the serous cavities filled with effusion. He thought the arterial tension consequent on the convulsions was the cause of the exudation.

Dr. R. A. CLEEMAN had tried all plans, and none of them were certainly successful; every method would fail at times, and any method would be followed by recovery. He thought bleeding should be tried in every case to remove the vascular tension, which was the great source of danger.

Dr. B. TRAUTMANN had had under his care a primipara, plethoric, who was suffering from puerperal convulsions. She was bled, a large dose of calomel was given, chloral was administered, and pilocarpine was injected, but all without effect, the patient died. In another case the urine contained fifty per cent. of albumin, with casts, and no convulsion occurred. What was the relation between albuminuria and convulsions? Was the origin of the convulsion in the nervous system, and the albuminuria a result?

Dr. H. F. BEATES remarked that, the presence of urea in the blood being generally considered a prime factor, most of the forms of treatment had reference to its elimination. Bleeding should be very free to act in that manner, and if it was prompt and free it would be followed by improvement; pilocarpine acted as an eliminator of urea by the skin, thus relieving the kidneys and the system. He had treated two patients by this method, and both had recovered.

Dr. PHILIP M. SCHIEDT had recently had under his care a primipara, aged twenty-five years; she had convulsions for four hours; chloral and bromide of potassium had been given freely, but with no effect; a hypodermic injection of three quarters of a grain of morphine sulphate was followed by quick relief. She was very plethoric, but there was no need for bleeding after the use of the morphine.

Dr. BAER, in the second case, had considered version by the vertex, but thought that he could deliver more quickly and with less danger to both child and mother by means of podalic version. He considered elimination a false principle in the treatment of puerperal convulsions. First stop the convulsions, eliminate afterward, if there be any necessity for it. How much elimination could be effected by drawing twenty or even forty ounces of blood? The majority of these patients needed all of the blood they had; they had none to spare. There was a neurasthenia at the bottom of these attacks. The patients were generally nervous and depressed from circumstances connected with their physical and social condition. Dr. Penrose,

in his lectures at the University, taught bleed—bleed; every patient that was bled sufficiently got well, every one that was not bled died. Dr. Carson's lecture followed immediately after that of Dr. Penrose, and he was as bitterly opposed to bleeding as Dr. Penrose was enthusiastic in its advocacy. He (Dr. Baer) had been afraid of pilocarpine, because its action, once established, could not be controlled. He thought, however, the effusions observed had been caused by the convulsions, and not by the remedy. Morphine, used hypodermically, was the remedy upon which he put dependence; it would control the convulsion. Any medicine administered by the mouth or rectum must be of slow and uncertain action, because of the slowness of absorption from the alimentary tract.

W. H. H. GITHENS, M. D., *Secretary*.

NEW YORK SURGICAL SOCIETY.

(Concluded from page 556.)

NEW INSTRUMENTS.—Dr. WEIR exhibited several new instruments designed to aid in controlling hæmorrhage during operations. Among them were Tait's and Esmarch's forcipressure forceps, Jouillard's forceps for removal of goitre, and a ligature-carrier of his own device.

COMPOUND FRACTURE OF THE THIGH AT THE JUNCTION OF THE SHAFT WITH THE LOWER EPIPHYSIS; AMPUTATION.—Dr. POST presented a specimen with the following history:

September 16, 1883, I was called to see W. D., a boy eight years of age, in consultation with Dr. Lathrop, of Wurtsboro, and Dr. Van Winkle, of this city. About two months before I was called to see him he was with his father's family in the country, and, riding in a wagon, his left knee was caught between the spokes of a wheel and violently wrenched. The result was a fracture of the thigh at the junction of the shaft with the lower epiphysis, the end of the shaft projecting through an extensive wound on the outer side of the knee. The severity of the injury was such that Dr. Lathrop, who was called in, recommended immediate amputation; but the parents would not consent. The patient was brought to town the day before I was called to see him. I recommended that he should be etherized, and the limb be thoroughly examined.

17th.—The patient was etherized. The limb was much swollen from the middle of the thigh to the foot. There was an extensive wound on the outer side of the knee, through which protruded the end of the shaft of the femur detached from the epiphysis, and in a state of necrosis. Sinuses extended through different parts of the thigh, leg, and foot. There were sloughs over the sacrum and over the heel. The posterior part of the os calcis was exposed and carious. Portions of the shaft of the tibia and fibula were exposed and rough, indicating superficial necrosis. The anterior extremities of the astragalus and cuboides were exposed and rough. Several of the other tarsal bones were in a similar condition. The patient was very pale and emaciated, but his appetite and digestion had been pretty good. I performed amputation in the middle of the thigh. The incision passed through the upper end of an abscess, through which a finger could be passed up four or five centimetres. The operation was well borne, and very little blood was lost. The wound was thoroughly washed with carbolic acid, 1 to 40. A tent was introduced into the suppurating cavity, and the edges of the wound were brought together with sutures. Absorbent cotton was applied, and pressure made with a roller bandage. On examining the limb, the epiphysis was found *in situ*, but eroded, and almost denuded of cartilage. The head of the tibia was in a similar condition. The knee joint was disorganized. The medio-tarsal articulation was open; the cartilaginous sur-

faces of the astragalus, cuboid, navicular, and two of the cuneiform bones were eroded. One of the cuneiform bones had been discharged.

18th.—The patient was troubled with vomiting after the operation, and he has not regained his appetite. He has slept for a number of hours; his pulse is steady, and not very feeble. Directed milk with arrowroot, and a little brandy, as the patient can be induced to take it.

19th.—Dressed wound and removed several of the sutures. Patient has moderate diarrhoea, but no vomiting. Ordered paregoric, p. r. n.

21st.—Dressed wound again; the edges have receded at lower part. Removed all the sutures; washed wound with carbolic acid, 1 to 40. Applied emp. adhes. and bandages to close wound. Diarrhoea continues. Ordered mistura cretæ with t. op. camphor.

25th.—Decided improvement in general condition. Wound granulating.

October 3d.—Wound rapidly healing. General health steadily improving.

9th.—Continued improvement.

SUPERITONEAL FIBROID TUMOR OF THE UTERUS, WITH BOTH OVARIES AND STUMP OF THE UTERUS, REMOVED BY LAPAROTOMY.—Dr. BULL presented a specimen, and related the case. A single woman, aged thirty-four, was admitted to his service at St. Luke's Hospital, in August of this year, with a history of frequent backache, dragging pains in the lower part of the abdomen, and vesical tenesmus for three years previously. Menstruation was regular. In the middle line of the lower part of the abdomen was a smooth and rounded tumor as large as a child's head, plainly felt above the pubes and in the cul-de-sac of Douglas. It was movable, not tender, and apparently cystic. The uterus lay in front of it, and was anteverted and thrown over to the right, where the fundus could be felt through the abdominal wall. Dr. Bull had seen the woman six months before, when the tumor was no larger than an orange, but, Dr. Thomas and Dr. Hunter having advised against an operation, he had decided to wait. On her entering the hospital again, Dr. C. S. Ward agreed with Dr. Bull as to the advisability of an operation, which was performed on August 14th. After exposing the tumor by an incision five inches long, adhesions were found to the ovaries and uterus. A double silk ligature, carbolized, was passed round each broad ligament. The uterus, just above the vaginal junction, was first temporarily constricted with an écraseur, and the tumor cut off an inch and a half beyond this. The pedicle (uterus) was then transfixed and tied with carbolized silk, cut off again half an inch beyond the silk, rubbed with iodoform and returned. On the left side of the pelvis the torn surface of the broad ligament bled. One silk ligature was applied and the surface was rubbed with iodoform. The sutures were removed on the fifteenth day. The temperature ranged between 98° and 99.5° F. On the second, third, and fourth days there was vomiting, with slight abdominal pain and tympanites. The tumor was examined by Dr. Ferguson, who reported that it was a fibro-myoma, subperitoneal, springing from the posterior surface of the uterus, about equally from the body and the neck. The ovaries were normal in size, the left containing two small cysts. The uterine body was slightly enlarged and laterally flexed. The neck, above the point of section, was elongated. The mucous membrane was normal.

Dr. E. L. KEYES exhibited the different kinds of forceps employed by Sir Henry Thompson for the removal of tumors from the bladder.

THE SANITARY INSTITUTE OF GREAT BRITAIN will hold its annual congress in Dublin next year.

Reports on the Progress of Medicine.

OBSTETRICS AND GYNÆCOLOGY.

By ANDREW F. CURRIER, M.D.

(Concluded from p. 562.)

SUPERINVOLUTION OF THE UTERUS.—Dr. A. R. Simpson ("Edinburgh Med. Jour.," May, 1883) applies this term to the atrophic process which in some cases occurs to women in advance of the physiological changes which attend the "change of life." Five conditions are mentioned in which it may occur, viz.: 1. Wasting diseases, e. g., phthisis. 2. Paraplegia, sometimes. 3. After severe ovarian disease, or ovariectomy. 4. After pelvic inflammations, and consequent impairment of the circulation. 5. Uterine disease, e. g., sub-peritoneal fibroids. [We beg to add a sixth possible condition, which we have never seen mentioned, viz.: an excessively fat condition of the body in general. In several instances we have found under-sized uteri in very fat young women, the latter condition suggesting imperfect circulation and nutrition of the pelvic organs. These patients were, as a rule, sterile.] The author refers particularly, however, to the atrophied uterus which follows labor or abortion. This atrophic process may affect the cervix alone, or the body alone, or both. The ovaries also may share in the process. As to ætiology, in addition to what has been already mentioned may be given anæmia, especially among those who have suffered from exhausting discharges post partum; nervous derangement, especially in puerperal insanity, and in paraplegia, as already mentioned; over-lactation, which has been especially commented upon by Chiari and Frommel as a means of causation; rapid succession of labors, though the author thinks that subinvolution would be more probable; local inflammations. As to symptoms, amenorrhœa is the most prominent, and Chiarleoni alludes to anaphrodisia. The diagnosis is not difficult, being made by the bimanual examination, aided by a cautious use of the sound. The treatment should be constitutional, especially in anæmic patients, aided by suitable local treatment, as dilatations, stem pessaries, etc., which may and which may not accomplish the end desired.

AN ANALYSIS OF THIRTY-ONE OPERATIONS FOR REPAIR OF LACERATION OF THE CERVIX UTERI.—Dr. Ely Van de Warker ("Am. Jour. of Obstet.," July, 1883) makes a very creditable report of his experience in Emmet's operation in his customary felicitous style. He considers that the *faint praise* with which the operation has been received in Europe is due to bad management on the part of its American advocates, who have claimed too much for it. The author's conception of the operation is that it "is designed to relieve a specific injury, and those general and local symptoms that result from it." It does not follow that cervical catarrh and retroversion, if present before the operation, will be cured by it, since (if we understand him aright) they are but accidental conditions. [In this opinion the author will find very many who will disagree with him, and who look upon cervical laceration, cervical catarrh, uterine engorgement, and retroversion as a natural sequence of events, though certain modifying conditions may prevent this order.] The author's statement of the symptoms which he has found in connection with laceration of the cervix show clearly that he has not only made careful examinations, but that the subject has also been a matter for reflection with him. The statistical tables of his thirty-one cases are four in number, the first showing the "relations of sterility to laceration of the cervix uteri," the second showing the antecedent conditions, the third the objective and subjective conditions, and the fourth the results. This arrangement affords an excellent synopsis of the cases, and a valuable

addition to the history of the operation. The summary of the tables is as follows, in the author's words: "Uterine displacement unchanged in sixteen cases. Uterine displacement improved in eleven cases. Uterine catarrh unimproved in ten cases, and improved in eleven cases. Subjective symptoms unimproved in three cases, and improved or entirely relieved in sixteen cases. Nutrition improved in eighteen cases, and remaining unchanged in five cases. Other treatment was found necessary in twelve cases." If "simply closure of the laceration, nothing more," be, as the author says, the direct result of this operation, it would find very few advocates. [In this radical expression we beg to differ with the author, though we believe with him that those who expect the operation will *necessarily* cure retroversion and cervical catarrh are over-confident.] His statistics, in a fifth table, as to the positive effect of the operation in curing sterility, are of value, though they must be verified by a much larger number of cases in order to carry conviction to the minds of doubters. His description of his needle-forceps and its method of use does not convince us that they are so simple as he would have us believe. The following statement, too, seems quite remarkable: "My assistants now are inclined to regard an operation a manipulative failure, *no matter how many sutures are required* (italics are ours), that exceeds twenty minutes in length." Finally, the author recommends operation without any preparatory treatment, upon the ground that the *operation* is only preparatory and subsidiary to other treatment. [Another assertion which is, we think, too sweeping and misleading. Emmet's conservatism in enjoining such preparatory treatment as shall remove all tenderness in and around the pelvic organs is, doubtless, one great cause of his excellent results. Temerity in this operation is not to be recommended when it renders pelvic cellulitis more than probable.]

PHYSOMETRA.—Dr. H. C. Yarrow ("Am. Jour. of Obstet.," August, 1883), in reporting this case, calls attention to the rarity and the peculiarity of the condition. The patient was a negro, forty-six years of age, who was supposed to be pregnant, and to have gone four months beyond the ordinary time for the termination of that condition. Resonance was obtained over the entire extent of the abdominal tumor, upon percussion, and auscultation failed to reveal any indication of pregnancy. The author was called in consultation, and happily diagnosed the condition as that which is mentioned in the heading. A speculum was introduced into the vagina, and through it a sound was carried into the uterus, traversing the cervical canal and internal os with some difficulty. The result was an immediate collapse of the abdominal tumor, the escaping gas being odorless, and passing out with great force. A lengthy narration of cases covering the literature of the subject follows, and the conclusion reached is that this condition, or tympanites uteri, is due (1) to the presence of some decomposing substance in the uterine cavity; (2) to an impediment to the escape of the gases of decomposition.

THE DEVELOPMENT OF UTERINE MYOMATA.—Kleinwächter ("Ztschr. f. Geb. u. Gyn.," ix, 1) informs us that the precise steps in this process are not yet fully known. There is a transformation of round into spindle cells which can not be distinguished from organic muscular fibers, but that there is hypertrophy to any extent on the part of the muscular fibers themselves is not probable. It is difficult to say whether the round cells take their origin from connective tissue or from divisions of the cells of muscular tissue. In making his investigations, the author found that small growths were much better suited to his purpose, since in the larger ones either the process of development was completed, or the particular points were hard to find at which it was still incomplete. The specimens studied were either myomata or fibro-myomata, pure fibromata being

never found by him. They were usually subserous and multiple, in many cases were located upon the fundus uteri, less frequently upon its posterior aspect, or upon the lower segment of the body, and exceptionally upon the anterior wall. Wherever the growth projected from the body, it was usual to find the peritonæum somewhat thickened. The bundles of muscular fibers crossed each other in all directions, and were very compactly arranged. The dimensions of the cells and their nuclei were somewhat greater than is customary in the ordinary muscular fiber of the normal unimpregnated uterus. The form of the growths was usually spindle-shaped, with a tapering pedicle extending from one side. The capillaries were usually abundant and large, but there were few arteries and veins. On both sides of the capillaries were rows of round cells, which in many cases formed a sort of covering. These round cells seemed gradually to take on a spindle-shaped appearance. As this development progressed the capillaries were gradually obliterated, until at length, in place of several vessels, there would appear only a bundle of muscular fibers. The pedicle usually disappeared in the neighboring connective tissue, suggesting that the tumor had developed from such a point. In the multiple form of this growth each separate tumor had its own capsule, or else a strong layer of normal muscular tissue, for a covering. A new development of vessels was observed in fibro-myomata, but never in myomata.

EXTIRPATION OF THE CANCEROUS UTERUS.—The "Med. Times and Gazette" (May 5, 1883) abstracts from the report, in a recent number of the "Archiv für Gynäkologie," of the Medical Congress at Eisenach, in September, 1882, certain data with reference to this subject, of which the following is a summary: Olshausen had performed the operation *per vaginam* successfully twenty times, with fourteen recoveries. In nineteen of these cases the cervix was diseased, and in three the body of the organ. In one case a myoma upon the posterior wall of the cervix was mistaken for cancerous disease. Of those who recovered, one died in fifteen months after the operation, another in seventeen months, both from a recurrence of the disease, and in a third the disease had recurred, but the patient was living at the time of the report. In three other (additional) cases Olshausen had attempted to remove the organ by the same method, but had failed on account of adhesions to the rectum and bladder. Martin, of Berlin, reported that he had attempted the same operation in thirty-one cases, in five of which it was incomplete. Two of the incomplete operations were fatal, and four of the complete. Within a year and a half the disease had recurred in all the survivors, with one exception. Sänger, of Leipsic, reported two successful operations. One of the subjects died from recurrence in ten and a half months, the other had been operated upon only a few weeks before the report.

OÖPHORECTOMY.—Tauscher ("Ztschr. f. Geb. u. Gyn.," ix, 1) makes his experience and observation the basis of the following propositions: 1. With proper precautions the operation is not attended with great danger. The unavoidable mortality is now less than ten per cent. 2. The operation should be done with antiseptic precautions, and under the carbolic-acid spray; the abdominal cavity should be closed, drainage being necessary only in exceptional cases. 3. Since the time for the climacteric is not a fixed period, the age of a person, with reference to the climacteric, is not to be considered in all cases. 4. Hegar's proposition, that palpation of the ovaries must be possible in cases which are to be operated upon, is impracticable. 5. Both ovaries should be removed, excepting in cases in which peculiar circumstances demand the retention of the second *undiseased* ovary. 6. The tubes should also be removed if they show the slightest evidence of disease. 7. Hystero-epilepsy is curable by castration. 8. The symptoms which, collectively, are known

as hysteria, are often attributable to ovarian disease. 9. The question as to the influence which ligation of large nutrient vessels will exercise upon uterine fibro-myomata, without castration, is well worth consideration. 10. The climacteric will, as a rule, quickly follow the operation, excepting in cases in which inflammation has attacked organs contiguous to the ovaries. In case of such accidents the climacteric is usually delayed. 11. Many months *may* elapse before the ultimate value of an operation can be estimated. 12. The question as to the influence of diseases of the female genital organs upon the development of certain psychoses is an open one. 13. The same may be said of the question as to whether castration will cure such psychoses. 14. In contributions to the clinical literature of this subject, it is desirable that the cases be grouped under such a plan as was proposed by Hegar, or something which resembles it.

Miscellany.

THERAPEUTICAL NOTES.—Anæsthetic Mixtures.—M. Guillot, a dentist of Lyons, France ("Progrès médical," October 13, 1883), gives some points in his personal experience with various anæsthetic mixtures. He has experimented with several of them in the dental clinic at Geneva, and in his own private practice, with a view to obtaining an anæsthetic that should be safer than chloroform and more prompt in its action than ether—in short, one that should present as many as possible of the advantages, and as few as possible of the disadvantages, that attend the use of anæsthetics. In 1877 the Odontological Society of London appointed a committee on anæsthetic mixtures. That committee experimented with three such, the formulæ of which are as follows: 1. Alcohol, one part; chloroform, two parts; ether, three parts. 2. Chloroform, one part; ether, four parts. 3. Chloroform, one part; ether, two parts. Dr. Guillot obtained the best results from the first, a combination which had been proposed by Dr. Harley. The physiological effects of the second were almost identical with those of simple ether. The third had an action intermediate between the action of chloroform and that of ether. A mixture proposed by Lennox Browne proved, however, superior to either of the three foregoing. It consisted simply of one part of alcohol and two parts of chloroform. This was more active than the first mixture above mentioned. It was of great service in extracting the teeth of children who were apt to be frightened by the apparatus used for the administration of nitrous-oxide gas. In order to make his mixture more agreeable to the patient, Browne replaced the alcohol in it with eau de cologne. This combination was called "chloræthérine." Its action was rapid and very satisfactory. It was administered in a large number of cases at the dental clinic, for a period of four years. Numerous patients who had taken it were interrogated as to the sensations it produced. None of them complained of the nausea or disagreeable feelings in the head that follow anæsthesia from ordinary chloroform. Dr. Sanson is said to have proved that the alcohol mixed with the chloroform has a very valuable sustaining influence on the heart. A frog that he had anæsthetized with the alcoholic mixture "could not perish, although he pushed the anæsthetic to the last degree." Moreover, he avers that the administration of alcohol by the stomach has by no means the same sustaining action on the heart.

Dr. Guillot's method of employing "chloræthérine" is as follows: A small napkin is rolled into an inhaling cone, an opening being left, however, at the small as well as at the large end. The proper shape is maintained by the use of pins. Two grammes of the mixture are poured upon the lower part of this inhaler. After inhalation has gone on one minute, two more grammes are poured on the napkin. After another minute's inhalation, the opening at the top of the cone is closed for thirty seconds to prevent the entrance of air. At the end of the half-minute the patient is ready for operation. His mouth is

opened and the extraction of the teeth is accomplished. If it is desired to perform a longer operation, the inhalation may be continued. "Chloræthérine" has been used successfully in the removal of a good-sized tumor of the lower jaw. Dr. Guillot has never met with any accidents in the use of this anæsthetic mixture. Its use elsewhere has been unaccompanied with loss of life.

The Administration of Quinine.—Dr. David Young, of Rome (Italy), is of the opinion ("Practitioner," October, 1883) that quinine is too indiscriminately administered in cases of fever, particularly in fevers which, occurring in malarial regions, are supposed to be more or less malarial in their nature. In such regions practitioners are too apt, he believes, "to give the benefit of the doubt" to almost any acute disorder ushered in by a chill and accompanied with a rise of temperature, and to treat such cases tentatively, in their early stages, when exact diagnosis is often impossible, with antipyretic doses of quinine. While such practice may be to a certain extent necessary and justifiable, he believes it to be unjustifiable unless the physician exercises more than ordinary discrimination in persisting with the quinine treatment. Without such discrimination, he is satisfied, from eleven years' experience in a malarial city and region, not only that the quinine may fail to do good, but that it may prove of the greatest harm. He details his typical cases which began, to all appearances, as malarial fevers. In one, quinine treatment aggravated the symptoms and death took place on the third day. In the other, the symptoms grew steadily worse while antipyretic doses of quinine were administered, until a condition quite like that in delirium tremens was set up. A change of treatment to two-grain doses of calomel, ice to the head, and Apollinaris water was followed by gradual but complete cessation of the symptoms that had been so alarming. (The case proved to be one of typhoid fever and ran its course. The patient made a good recovery.) From these cases Dr. Young concludes: 1. When the bowels are confined and the urine is scanty, antipyretic doses of quinine should not be given. 2. In cases where quinine is being given, and an increase of dose is thought to be desirable, such increase is safe if the skin, bowels, and kidneys maintain their functional activity. 3. During the administration of quinine, should a headache come on or increase in intensity, the case requires the most careful attention. Many physicians advise their patients who are about to travel in Italy to begin a regular course of quinine as soon as they cross the Italian frontier. This, in Dr. Young's opinion, is a pernicious practice. A considerable number of English and American tourists suffer from actual cinchonism as a result of their following too assiduously this well-meant but unwise advice. Moreover, although both remittent and intermittent fevers appear to arise from the same cause, and although they present similar clinical features, and may even alternate and replace each other in the same individual, there is, nevertheless, a great difference in their respective behavior toward quinine. Quinine is a better prophylactic against intermittent than against remittent fever. Furthermore, while quinine maintains its curative power over cases of purely intermittent ague for a long period, its efficacy in remittent forms of the disease is often quickly spent, and in some cases is not manifested at all. In Rome but a small proportion of tourists who suffer from fever are affected with the intermittent type.

Many patients have an idea that they can not take quinine at all. Such notions are sometimes encouraged by physicians. A large proportion, at least, of these patients will tolerate quinine if it is administered in combination with other drugs. The therapeutic relations which exist between certain remedies are of great importance, and deserve more investigation and consideration than they have hitherto received. Iron, for instance, with a saline, will often be well borne and produce good effects in cases in which, alone, it is not well borne. Cases of chronic intermittent ague will defy quinine and yield to arsenic, or, more curiously still, to Warburg's tincture, a preparation containing quinine in varying proportions as its chief ingredient, together with other apparently unimportant substances. Very many of the patients who have a constitutional antipathy to quinine, and believe therefore that they can not take it, are able to take the alkaloid if it is given with chloride of ammonium or a salt of potassium.

Iodoform in Chronic Cystitis.—Dr. David Prince, of Jacksonville, Illinois, has met with success ("St. Louis Medical and Surgical Jour-

nal," November, 1883) in several cases of chronic cystitis by the use of iodoform. A soft catheter is introduced into the bladder, which is by this means thoroughly emptied, if there is any residual urine which the patient is unable to void voluntarily. Then fifteen cubic centimetres of the following preparation are to be injected: Five grammes of iodoform are ground with twenty-five grammes of starch, and the whole is "moistened" with forty cubic centimetres of water. The mixture is to be injected daily and allowed to remain. The medicament is not entirely expelled at the first subsequent passage of urine, as the heavy crystals of iodoform adhere to the mucous membrane. Starch was the substance chosen to incorporate with the iodoform because it was free from irritant properties. This treatment speedily allays the irritation of the vesical mucous membrane, and with it the painful reflex contraction of the muscular coat of the bladder. The relief of this reflex contraction greatly increases the available capacity of the bladder. "In the case of a gentleman who had suffered greatly for several years, there was no pain after the first introduction of the iodoform. He thought after four days' treatment that the capacity of his bladder had been doubled." Dr. Prince believes that the same treatment will be found beneficial in gonorrhœa. He thinks it will prove better than the use of pencils or bougies of iodoform and gelatin, because the iodoform, as he employs it, adheres to the urethral mucous membrane, and its action is therefore kept up for some time after the injection has been allowed to escape. The action of iodoform when used in pencils or bougies can last only while they are retained. Dr. Prince also suggests that the treatment of moderate strictures of the urethra, accompanied by vesical inflammation, may be advantageously preceded by the use of iodoform and starch. Mechanical dilatation, electrolysis, or other measures, will, of course, be required afterward.

The Prevention of Mammary Abscess.—Dr. Richard Wood expresses the "firm belief" ("Midland Medical Miscellany and Provincial Medical Journal," November 1, 1883), based upon an experience of ten or twelve years, that no breast during lactation would ever suppurate if proper preventive treatment could be adopted early enough." His plan is, in the first place, to watch closely for premonitory signs of trouble in the mamma. These are: first, pain and soreness about one of the nipples. This warning must never be disregarded. A glass shield, with a tube and an India-rubber nipple for the infant, should be put in use at once, and local applications of glycerite of tannin should be made frequently. If the mother continues to suffer in spite of these measures, the child must not be allowed to nurse from the affected breast. These means will probably be sufficient, if there is no localized induration, redness, or tenderness in the substance of the breast itself. If, however, such a condition exists, no time should be lost before active treatment is begun. If shivering has occurred, it may already be too late. To insure success, the case must be taken in hand the same day the pain and hardness are first noticed. A piece of lint, doubled four times, and ample enough to cover the tender part of the breast easily, is to be soaked in one ounce of belladonna liniment. This is to be laid on and covered with gutta-percha tissue, and the whole "bandaged up carefully with three bandages, each six yards in length." A five-grain pill of calomel and the following mixture are to be prescribed internally:

R Tincturæ belladonnæ,	3 fij;
magnesii sulphatis,	3 iss;
spiritus chloroformi,	1 ij;
aquam destillatam	ad 3 vj.

M. Sig. Two tablespoonfuls every three hours.

In very delicate women the effect of the medicine must be carefully watched. If the bowels act more than four or five times, it must be stopped, but resumed again on the following day. The belladonna, however, should not be stopped unless the head, tongue, throat, or pulse makes it necessary. The second day the dressing should be resumed and reapplied as before, after the lint has been soaked in more belladonna liniment. The breast must be well supported by carrying the bandages around the neck and shoulder every time. The hardness and inflammation should yield in about three days. After that period a few more dressings on alternate days may be required. Meat and all stimulating beverages should be interdicted from the outset. For the first day, the less the patient eats the better. "At the same time the

nurse should have instructions not to be afraid to give brandy, if there should be signs of fainting from the violent action of the aperient."

This treatment [which Dr. Wood appears, from the sentence just quoted, to recognize as heroic] has proved successful in his hands even in cases in which this most painful and distressing affection had been allowed to go without proper attention for two or three days. It would be well for physicians to caution women whom they attend in confinement, or their attendants, that the first indication of trouble in a nipple or breast is a warning that should be promptly attended to. To regard it, as so many women do, as one of the little things which are too trivial to need the attention of the physician is to invite an experience which, of those ills that do not actually threaten life, is about as serious as a woman can undergo.

THE BRAIN GAUGE.—Among the interesting minor points touched upon at the recent meeting of the British Association was that of the relation and constant ratio existing between the size and capacity of the skull in different races, and the dimensions of the adult female pelvis. The conjugate diameter of the pelvic brim of the mother, it was explained, acts as a gauge of the potential brain-power of the offspring, by forbidding the passage into independent existence of any child having a skull, and therefore a brain, of disproportionate size. This is a fair and rational conclusion, and is fully borne out by the facts and figures regarding still-birth which have been placed on record by various observers. Thus it was shown by Sir James Simpson that the heads of male children measure, on an average, about half an inch more in circumference than those of females, and that, in consequence, a larger number of male than of female foetal skulls are denied passage by the maternal pelvis, causing a considerable numerical excess of male over female still-born infants. It has been shown also, with sufficient clearness, that, broadly speaking, the size and weight of the brain, and, therefore, the external measurements of the skull containing it, may be taken as a measure of the intellectual power of the individual. There is a philosophical interest attaching to these conclusions, which does not perhaps appear quite on the surface. The bony frame, or diameter of the maternal pelvis, is thus made to serve as a direct measure and means of limitation of the mental capacity. It follows that it is impossible that any race or family should so develop exaggerated or phenomenal brain-power as to cause a deterioration or puny caliber of the osseous and muscular systems. For, the pelvis becoming contracted and ill-developed as the brain and skull became overgrown, the former would gradually exclude the passage of the latter, and the over-intellectual race, with disproportionate cerebral power, produced at the expense of the physical forces, would rapidly become extinct. The converse of this proposition would hold equally good, and the large maternal pelvis, acting, as before, as the gauge of the intellectual power of the offspring, the mother possessing the best physical conformation would become the only possible parent of the son gifted with the largest cerebral development. Intelligent natural selection would lead thus to the choice by men of massive intellect (who might be desirous of reproducing their mental attributes in their children) of wives in whom the roomy and expansive physical type should afford the best chance of the large and highly organized foetal brain passing the gauge. It is perhaps to be regretted that the question of the improvement of the human race by a process of rational, as opposed to natural, selection is one more of theoretical philosophy than of practical possibility.—*Med. Times and Gaz.*

SIR JAMES PAGET ON RECREATION.—The address recently delivered by Sir James Paget at the Working Men's College, though treating of a subject pretty well worn, was so suggestive as to warrant us in reverting to it from a standpoint slightly different from that taken by us in our remarks last week. Sir James laid down what he considered the essential elements of healthy recreation—uncertainty, wonder, and the exercise of skill; and analyzed each, giving fitting examples. Mental fatigue may find its counterpart in mental or bodily exercise. The industrious student, often at the hour of midnight, lays aside his intricate mathematical problem, or record of disease, or involved legal argument, and turns with a sense of relief, not alone to indolent repose, but often to follow the development of an enchanting love story, or the word painting of such a novel as "Endymion." Or he takes up his

cue for a game of billiards, his mind exhilarated by the contemplation of a skillfully applied "side" or "force" and knowledge of "strength" and "angles." His nerve-cells, in a state of tension, or polarized, as it were, by hours of study, are gently lulled to rest by inaction, or action of another kind. We find in nature wonderfully different methods of attaining the desired end. It seems as though in some cases the bane is its own antidote, as when one form of mental strain is relieved by another of like kind. In our own profession, who has not changed, with foreseen advantage and ease, a dissertation on obstetric mechanism by Barnes for a pathological discourse by Billroth! But the highest advantage is gained, perhaps, when recreation combines both mental and physical exercise. Nothing is more conducive to the repair of an over-wrought brain than a mountain ramble, made interesting by observation of the works of nature. How differently does the dissection of a plant, or the chipping of a rock, seem under such circumstances. There is a certainty of acquiring knowledge—a certainty of success, without the dread of failure at an examination. When Sir James speaks of the American marveling at our hansom cabs, he recalls to our mind the pleasure that lit up the countenance of an American lady as she remarked, "There are two things in which you English beat us—your strawberries and green peas." These things seem trifles in themselves, and yet they represent moments of relief in the days and hours of strain. It should be a part of the education of students to teach them how to play, and to place the means of harmless recreation within their reach. Clubs attached to our medical schools, debating societies, cricket, and football, are among the resources that go to lighten the labor which brings much enjoyment, but some necessary distress. The yearly holiday, or the vacation after term, is not enough; there should be an oft-recurring alternation of work and play.—*Lancet*.

ACORNS.—The rough autumnal blast is strewing the fields with an unusually plentiful crop of acorns. So thickly studded is earth's grassy lap with this astringent harvest that one is tempted to inquire what purpose (besides the reproduction of the quercine genus) the acorn may serve in the economy of nature—to what use, medicinal or dietetic, it may be applied by man or beast. In many parts of the country, in nearly all rural districts, in fact, in which we have made inquiry on the subject, acorns are in common use by the rustic population as a medicine in diarrhoea from whatever cause. A store of dried acorns forms part of many a country housewife's domestic pharmacopoeia, and the grated powder is administered with good effect in many cases of intestinal flux. Probably, since the acorn contains so very large a proportion of tannic and gallic acids, its operation in such cases is at least as beneficial as that of any tinctures of kino, catechu, rhatany, or other official astringent, administered by proper authority. Vast quantities of acorns, as we all know, are also greedily eaten by pigs, deer, and possibly other animals, who become fat and well-conditioned on this fare. It would be interesting if we could learn from some of our veterinary friends how it is that these creatures can live and thrive upon a diet which, though it may contain some nutritive material, contains also so overwhelming a share of tannic and gallic acids that even the porcine digestive apparatus ought theoretically to be brought to a deadlock by its use. Is it the fact, may we ask, that pigs, deer, etc., suffer occasionally from costive or obstructive troubles, by the drying up of the intestinal secretions as a result of a free diet of acorns at this season? And would it be possible, may we ask again, to make any use of acorns, crushed or ground, as an admixture in the food of horses, especially those in whom a constant looseness or "scouring" makes sleek appearance and good condition almost an impossibility?—*Med. Times and Gaz.*

ARTERIAL LESIONS IN VARICOSE ULCERS.—The difficulty of interpreting the relations of associated changes constitutes one of the most beneficial exercises for the development of a logical state of mind. Cornil and Ranvier have observed endarteritis frequently in the tissues of wounds, ulcers, and inflammations of the connective tissue. Some new investigations on varicose ulcers by MM. Arnozan and Boursier have revealed a remarkable degree of change in the arteries of the parts bounding the ulcer. In the smallest vessels an increase in thickness of the muscular coat has been measured. In the larger arteries areas of endarteritis were discovered together with hypertrophy of the

muscular coat. What is the sequence of events in such a varicose ulcer? Is the ulceration dependent on the arterial disease, or are the vascular changes secondary in point of time to the ulceration? Are all the changes the result of increased venous congestion, or is there some other cause at the root of the whole of the alterations?—*Lancet*.

VACCINIA ATTENUATED VARIOLA.—In England the majority of physicians are probably inclined to accept the views of Messrs. Ceely and Baddock that cow-pox and small-pox are the results of one and the same poison. But the matter can not theoretically be considered as finally settled; for the prevalent opinion in France seems to be in favor of the duality of the poisons of vaccinia and variola. M. Warlomont, however, a thoroughgoing germ theorist, does not follow the lead of the majority of his countrymen. He has reopened the question by ingeniously introducing into the discussion the latest teachings on the subject of attenuation. It is known, he argues, that artificial media are capable of effecting a progressive attenuation of the virus of bacteria, so that generations preserving this attenuation of the virulence of the poison may be cultivated. Just as this has been proved for the bacteria of charbon, so it may happen to the germs of variola. Pushing the analogy further, M. Warlomont follows the stages of the modification of the variolous virus from man to horses and from horses to cows. It so happens that the mean temperatures of man, horses, and cows form an ascending scale, being respectively thus: 37.5°, 38.25°, and 39° C. M. Warlomont therefore urges that the microbe of variola, in passing from the human organism to the system of the horse and then proceeding to that of the cow, would undergo a kind of forfeit similar to that which the bacteria of malignant pustule suffer when cultivated in artificial bouillon of which the degree of heat is purposely augmented. Science demands something more than mere ingenuity to establish the occurrence of such a conjunctural process.—*Lancet*.

LARYNGEAL CHOREA.—What may take place over the whole body may occur in any portion of the anatomy. That seems to be the principle on which M. Blachez worked when he spoke at the Académie de médecine last week on what he chose to term chorea of the larynx. The affection had been observed in two boys, aged ten and six years, the children of parents with rheumatic history. The laryngeal disturbance manifested itself as a nervous cough, very like the hoarse barking sometimes met with in hysteria, of which condition, however, there were no other signs in the boys in question. We are familiar with the deep barking cough so frequently accompanying the accession of the state of puberty, in the male sex more especially, but the above instances seem hardly to come within that category. The term chorea seems so wedded to the idea of a more or less general affection of the muscular system that it seems hardly justifiable to speak of a laryngeal chorea.—*Lancet*.

ARMY INTELLIGENCE.—*Official List of Changes of Officers serving in the Medical Department of the United States Army from November 10, 1883, to November 17, 1883.*—BACHE, DALLAS, Major and Surgeon. Ordered to report in person to the commanding general Department of the East for assignment to duty. Par. 10, S. O. 259, A. G. O., November 12, 1883. — GARDINER, J. DE B. W., Captain and Assistant Surgeon. Relieved from duty at Fort Huachuca and assigned to duty as Post Surgeon at Fort Bowie, A. T. Par. 1, S. O. 104, Department of Arizona, November 8, 1883. — EGAN, PETER R., First Lieutenant and Assistant Surgeon. Upon being relieved from duty at Fort Bowie, A. T., to proceed without delay to Fort Huachuca and report to the commanding officer at that post for duty. Par. 1, S. O. 104, Department of Arizona, November 8, 1883.

NAVAL INTELLIGENCE.—*Official List of Changes in the Medical Corps of the Navy during the week ending November 17, 1883.*—PASSED ASSISTANT SURGEON C. H. H. HALL ordered to the Naval Academy, Annapolis, Md.

SOCIETY MEETINGS FOR THE COMING WEEK.—*Monday, November 26th:* Medical Society of the County of New York. *Tuesday, November 27th:* New York Academy of Medicine (Council); New York Surgical Society; New York Dermatological Society (private); Jersey City Pathological Society (private). *Wednesday, November 28th:* New York Pathological Society; American Microscopical Society of the City of New York; Auburn (N. Y.) City Medical Association.

Original Communications.

IS CONSUMPTION COMMUNICABLE?

BY JAMES R. LEAMING, M. D.,

PROFESSOR OF PHYSICAL DIAGNOSIS AND DISEASES OF THE CHEST IN THE NEW YORK POLYCLINIC; SPECIAL CONSULTING PHYSICIAN IN DISEASES OF THE CHEST TO ST. LUKE'S HOSPITAL.

FROM the earlier days of medicine to the present time there has ever been a popular belief that consumption is communicable. Such a widespread and general opinion, continuing for ages and in many countries, must have some foundation in fact. Cases of consumption have followed each other under circumstances which have impressed observers as proof of its infectious character; as when a husband or wife has watched with the deepest solicitude the long-continued and vacillating illness of the other, to be finally overwhelmed with grief at the fatal result, and then to sicken and die under similar conditions.

The profession has at times inclined to the popular faith, and again has rejected it.

The discovery of true tubercle by Bayle in 1804, and of the methods and value of auscultation by Laennec, published in 1819, threw new light upon diseases included under the common name of consumption. It did more; it filled the professional mind with the idea of tubercle, to the exclusion of other and common forms of consumptive diseases.

The very important doctrines taught by Broussais, in Laennec's time, because they were not all of tubercle, were overshadowed, obscured, and misunderstood. The immense advantage of physical diagnosis by auscultation and percussio in getting a true mental picture of the pathological conditions of the chest was certainly weakened by the adoption of the exclusive doctrine of tuberculosis.

The erroneous interpretation of the respiratory act and of the significance of its murmurs, as taught by Laennec and his followers, confirmed them in the pathological error that all forms of consumption must necessarily be tuberculosis. But the fashion of careful post-mortem examination grew in favor, and the microscope vastly extended our knowledge of pathological results, and has established the fact that the tubercular is not the only form of phthisis. Still we are groping among the débris of protoplasm, cells, and proliferation, anxiously searching for the specific evidence of tuberculosis as an entity self-existent and self-propagating—something which has a separate life from the life of the body, and which is independent of it, antagonistic to it, and which overcomes it.

This view differs from that which considers consumption, either tubercular or fibroid, as inherent in the life of the body, which is excited to activity by irritation or depression, either physical or mental.

It is said that the giant cell characterizes tubercle and the spindle-shaped cancer, and that by them we are able to distinguish tubercular and cancerous products. But this knowledge of them does not determine the life-producing origin of tubercle nor that of cancer; whether they have a

distinct life outside the life of the body, and have only an accidental connection with it, or whether these morbid cell-forms are merely the materialized expression of disease-action of the immaterial life of the body. Animals have been experimented upon by inoculation of tuberculous matter, and tubercle has been the result, and it has been claimed that the question was solved in the affirmative. But, again, these same animals were inoculated with non-tuberculous matter, and the result was tubercle, proving that the character of the inoculated matter had nothing to do with the tuberculated results, but that irritation was the sole cause, and the result would be tubercle or cancer, according to the inherent tendency of the individual either to tubercle or to cancer. The irritation of teething endangers tubercular meningitis in children, and tuberculated phthisis may result from the irritation of adhesions of the pleura. Had not this theory of tubercular inoculation disestablished itself by these experiments, it would still remain an essential fact that inoculation is not infection, that poisoning the system by inoculation of any *materies morbi* is not conveying a germinating parasite into healthful respiratory organs, and producing disease in them of its own kind. But lately the medical world has been set wild by the publication of the discovery of Professor Koch of the presence of bacilli in tubercular cavities and in tubercular sputa.

It has been shown, too, by experiment that these independent life-forms may propagate themselves outside the body and in other menstrua than the débris of decaying tubercular cavities.

These facts appear to be demonstrated and accurately proved by other careful observers. But the deductions of Professor Koch are that these self-producing life-forms are the cause of tuberculosis and of tubercle, and propagate their kind in a healthful human lung, and, thence taking wings, are carried to and transplanted in other healthful lungs. Their propagation being rapid and abundant, and the medium of their conveyance the air we breathe, the danger therefrom becomes appalling to fearful minds, who dread the ravages of this most deadly of human diseases. To be entirely consistent, the germ theorists must deny the influence of heredity and external conditions, of local irritations or the depression of vital dynamics, as causes of consumption.

If it were not for the adoption of Professor Koch's theories, as well as the acknowledgment of his discovery of bacilli by gentlemen of high scientific attainments, such as Professor Rühle, of Bonn, and others, controversy would be unnecessary; but, as it is, we must examine the subject critically but dispassionately.

So far as I am aware, fibroid phthisis is not included in the forms of consumption claimed to be propagated by bacilli. The germ theorists appear to assume that all forms of phthisis are tubercular. But a large number of cases are fibroid, pure and simple, in which the diathesis is gouty or rheumatic, and not scrofulous. This large number are exempt from suspicion even. Again, a vast majority of cases of tuberculated phthisis commence with plastic exudation within the pleural cavity. These are called by Niemeyer

"catarrhal pneumonia," and he says "the great fear is that they may become tubercular." This fear is born of experience, and should direct us to proceed energetically, at the same time judiciously, to remove the plastic exudation while it is easy of accomplishment. Now, as long as the cases are not tuberculated nor tubercular, they can not be influenced by bacilli, for as yet there is no nest prepared for them. It may be well to state here that we make a distinction between tuberculosis and tuberculated phthisis. Tuberculosis is the systemic disease which gives birth to true tubercle—the miliary tubercle of Bayle. Tuberculated phthisis is the result of cheesy degeneration, in which cavities take place as a result of tuberculosis or other causes. The number of uncomplicated cases of tubercular phthisis—that is, of tubercle forming into concretions or nodules and being encapsulated, with no pleuritic adhesions and without fibroid in the lung, is extremely small. In a practice of more than thirty years in dispensary, hospital, and private, I can not remember more than a very few cases. Laennec and Louis evidently refer to these cases under the term of latent phthisis and acute phthisis.

This small number, commencing centrally in the lungs and not involving the pleura, are the only ones which could have had a parasitic origin. But even in these it is doubtful whether bacilli have anything to do with their tubercular origin.

I do not doubt the discovery of bacilli in tuberculous cavities nor in the sputa of tubercular consumptives, but I can not accept the inference that they are the essential cause of tubercle. They may find in a tuberculous cavity a fit soil or home where they may grow and multiply. There may be spores, eggs, germs, laid there by their parents, which, when perfected, may fly away to seek other tuberculous cavities in which to lay their eggs, etc.

Is there not analogy in the green-bottle fly that seeks carrion in which to lay its eggs, where they are hatched into maggots, which may increase the rapidity of the destruction of the carrion during their growth, but, becoming full-grown flies, they fly away to seek other carrion to plant their eggs, and thus continually propagate their race?

The bacillus of Professor Koch may be the maggot state of a distinct life, born of an egg or germ, and may perfect itself into another form which may fly away to find other tuberculous cavities, fit homes for the propagation of its kind, as germs, bacilli, and of the perfected life-form which will again fly away to find other tuberculous homes.

It is not probable, nor according to analogy, that the bacillus was always in that state, or that it will always remain as such, to be transplanted to healthful lungs and to cause tuberculosis; for it is not the disease, but a parasitic life which grows and perfects itself in the decay and débris of tuberculous cavities. It may increase the rapidity of decay in the necrosed lung, as the maggot does in the carrion, and it is our duty to prevent this if we have the knowledge and the power. But the bacillus is not necessary to explain the occurrence, cause, and course of phthisis—fibroid or tubercular. As has been stated, all but a very small number of cases commence as fibroid—that is, with plastic exudation within the pleura, in which the ba-

cillus is not a factor. This primary condition of phthisis may be the result of depressed vital power from various causes, long-continued and violent emotion, anxiety, worry, grief, or disappointment, as well as from catarrhal causes. Or it may, but in a less degree, be the result of adhesions from acute pleurisy, which are a physical cause of vital depression.

A mother, after watching her children, three or four in number, through scarlatina of a severe type, began to cough, lose weight, and finally died of phthisis. She was well when the children were taken ill; she was a loving, anxious mother, and as they were attacked successively the time of her anxiety was prolonged. The children all recovered, but the mother was sacrificed. She was not aware of having taken cold. The cough was so insidious that no one could tell when it commenced. Had there been the same prolonged anxiety over a case of phthisis, followed by inconsolable despair at the loss of the loved one, it would have seemed to prove the communicability of consumption. Scarlatina germs do not originate phthisis, nor do bacilli—it is the result of natural causes.

Failure in business after a prolonged struggle in a conscientious man may be, and frequently is, followed by phthisis. Disappointment in the young, where there is intensity of grief, is often followed by phthisis. In all of these cases, whether fibroid or tuberculated, the disease commences with plastic exudation within the pleura.

Even in tubercular phthisis, for a considerable time the disease is simply fibroid—preventable phthisis.

One word for the poor consumptive. Morbidly sensitive to all unpleasant sights, smells, and surroundings, and whose greatest comfort is kind and sympathizing companionship, is it not the refinement of cruelty to drive away from him unnecessarily those who should minister to his suffering?

THE PATHOLOGY OF ACUTE LOBAR PNEUMONIA

FROM A NEW STANDPOINT.

BY WILLIAM D. SCHUYLER, M. D.

Fifth Article.

The Process of Degeneration and Resolution.—The Verification of the Theory.

SUFFICIENT arterial blood, is, however, still supplied by the bronchial arteries, the nutrient vessels of the afferent pulmonary structures, to sustain organic life and stimulate lymphatic action, and also to promote degenerate softening of the exudate, which, it may be stated, has been in progress since exudation first commenced. On account of the loosely combined and adhering character of this hæmorrhagic exudate (which in common with any ordinarily formed coagulum soon separates into a more or less solid and a liquid portion), and being surrounded by the most favoring conditions of heat and moisture, its more complete degeneration, softening and final liquefaction now go rapidly forward.

One of the marked characteristics or features of this degeneration—seen at autopsy but impossible of recognition

except inferentially during life, and therefore of no clinical interest, and of no pathological value except as denoting post mortem the degeneration of the exudate going forward—is a change of color, which the involved lung has undergone, from a previous brownish red (pathological) to a yellowish gray or more complete yellow.

Besides these degenerative changes which relate to the already formed exudate, and, with the exception of, in some cases, a new cell-formation, a development of epithelium from the alveolar structures at this time (not generally recognized by pathologists, but which occurrence is mentioned by Niemeyer, and, according to Rindfleisch, “forms the proper central point of the stage now following, yellow hepatization”), there are no new events to be mentioned as occurring in the solidified lung until such time as circulation is resumed through it.

That softening is going forward may be determined by the physical signs now to be obtained—namely: less perfect bronchial breathing and less perfect bronchophony, a returning râle, at first fine, then mixed coarse and fine (the coarse occurring later), the râle redux of this malady; a gradual redevelopment of the vesicular respiratory sounds with the decreasing bronchial—rather, broncho-vesicular respiration, decreasing dullness, and soon, in some localities, or beginning in one locality, the complete respiratory vesicular murmur with more or less normal percussion resonance.

When this degenerative softening with shrinkage of the more solid elements of the exudate has advanced to a necessary degree, and lateral pressure is thereby sufficiently removed from the compressed capillaries, they are again rendered pervious by the force of the remaining, general, systemic blood-pressure (acting throughout in the larger divisions of the pulmonary arteries which, resisting pressure, remained open), and *circulation is resumed*. The re-establishment of this function may occur very quickly throughout the region consolidated, or gradually, the rapidity of this event depending upon the condition of degeneration, whether it is evenly concurrent, or is present in differently advanced stages. Where an attack of pneumonia results in a rapid general consolidation, or comparatively so, as in what may be termed normal cases, degeneration of the consolidate will advance evenly, and the conditions for the resumption of circulation will be nearly or quite synchronous. In these examples such re-establishment is rapid, and is the cause, as I shall show, of that significant group of symptoms the occurrence of which marks and is recognized as the crisis of resolution.

If, on the other hand, owing to conditions of general debility rather than local, the development of the anatomical process is gradual in which successive areas, greater or smaller, not limited, become implicated in succession, degeneration accordingly will be more or less, relatively, varied, and resumption of circulation as a whole will be gradual. When it is gradual, resolution is not marked by a rapid abatement of symptoms, convalescence is more extended, and is then said to be by lysis. As the former mode of resolution is the more common in acute primary cases, it may in that sense be regarded, as before stated, as normal.

However, as the unlikeness of the two recognized modes of resolution, by crisis and by lysis, is one of degree merely, and not due to an essential difference of cause, one requiring but a few hours to a day for its completion, while the second extends over one or more days to accomplish the same process, their manifest difference is not one of character, but of time only.

Resolution and removal of the consolidate by absorption and expectoration go on rapidly after crisis; and generally in the course of three days to a week, or thereabouts, the local signs, excepting slight dullness which may persist for weeks, disappear. And also, aside from an impaired respiration and a somewhat predisposing tendency to recurrence in some subjects, and in others a consequent general debility, the patient is as well as before the attack. If he is better than before, it is probably the result of altered conditions, which would as well have resulted from like treatment, less the pneumonic pathological element as a cause.

The above concludes a rational exposition, as I maintain, of the formation of the local anatomical process of this malady. It sets forth my theory of its initial lesion, and gives in order, as the unavoidable consequences of this lesion, and *the vitally necessary and continuing, and exaggerated resulting functional action*, the events of its formation as they occur, up to a subsequent and necessarily equalizing growth of the process (as regards systemic depletion and relief of morbid pressure) and its complete development. It also sets forth the causes for the self-limitation of the process, which are shown to be purely physical or mechanical in their action; and further shows that this generally recognized character of the disease, self-limitation, cyclical, is the logical and unavoidable consequence, through physiological action, of the events of the process; or, in short, of its own formation. Furthermore, the conditions during complete consolidation have been detailed; and the course of restoration of the involved lung to normal conditions and functional activity, through degeneration, liquefactive softening and absorption of the exudate, with consequent *pari passu* relief of the pathologically created, extra-vascular lateral pressure upon the capillaries, and resumption of circulation through these vessels, is also given.

I claim that such exposition is based upon adequate and logically scientific reasons, and that it correctly represents the process of the local affection of this disease.

FIRST.—*That the local process is the cause of the constitutional symptoms*, and, therefore, essentially constitutes the pneumonic disease, we have already partly seen in our study of its special or functional pathology, as given; where we found, (1) that the deranged circulatory phenomena—the obstruction of the blood in the lungs, the small arterial pulse, venous fullness and distension, approximate and in some cases dangerous increase of pressure in the afferent vessels before the obstruction, the overworked and possibly the overpowered right heart, and diastolic murmurs, (2) the respiratory difficulties—blocking of a portion of the pulmonary structure with the consolidate, with congestion and more or less œdema of the remainder, and a consequent degree of asphyxia, (3) the nutritive derangements—anorexia and apesia, (4) the ex-

cretory—scanty urine and constipation, (5) the nervous—anxieties, mental depression, delirium, and generally depressed nervous action, and (6) the sthenic derangements, or an early, exaggerated, and exhausting functional action, and a later corresponding and marked asthenia—were all to be accounted for by direct reference to the local obstructive cause. Again, in my scheme as set forth, and especially in its exposition, I have shown how the well-recognized constitutional, cyclical character of the disease and its self-limitation are to be accounted for; the former, by the varying conditions of the local process of accretion and decrection, or of development or formation and decrease or removal, and its consequently varying inhibitory effects upon functional action and sthenic reactions; and the latter (in a constitutional sense), by a resumption of circulation through the resolving, softening lung (the stoppage of which is the secondary consequence of such limiting action), to which resumption, I clearly show in my study of that event (in symptoms and course), we must attribute the phenomena of crisis—namely, the remarkable cessation of symptoms which occurs with that event, not otherwise explained. That the singular, I may say unique, defervescence which occurs with crisis, also cessation of morbidly increased respiratory movements, relief of the right heart, improvement of pulse in frequency and fullness, functional resumptions—as shown in an increase of urine, in recurrence of appetite and of bowel action, and in the mental relief which the patient subjectively experiences, are due to this cause (resumption of circulation), we may infer from the softening exudate as determined by physical signs, and also by general physical observations, notably with regard to arterial and venous conditions, and especially as to the peripheric capillary circulation, and an equalization (normal) of bodily warmth. Furthermore, in my discussion of these symptoms, I shall show that the febrile manifestation, “febris pneumonica,” and dyspnœa, which can not be accounted for by the extent of the local lesion simply, but results in part, also, from general collateral congestion and œdema, and is especially due to morbid pressure, and the hectic cheek, not before traced to a cause, are to be explained by reference, directly or indirectly, to the local obstructive process.

Thus we may conclude that the constitutional phenomena, however characteristic, synthetic, regular, and cyclical, and, therefore, seemingly essential they may appear to be, are due to and result from the local cause—which, as Jürgensen very truly says, “is the only constant element” in the disease. For the same reasons we may also conclude, in accordance with this hypothesis, that the local anatomical process of acute lobar pneumonia is its essential feature, and the cause of its entire pathological phenomena.

SECOND.—*That the primary initial lesion of this process is a pulmonary capillary insufficiency, as claimed,* we may conclude, (a) because, as we have seen, the process which follows is not inflammatory, and hence must be dynamic; (b) because it is possible upon this hypothesis, through immediate collateral action, in the manner pointed out, to explain the concrete extension of the process and the events which follow; (c) because functional insufficiency is not an

unusual event or condition, and with reason may occur in these vessels. It forms the basis of varicosities and of aneurysms, and is illustrated in cardiac insufficiency, also in atony of the bladder. Wherever a vessel or an organ is subjected to a pressure it can not tonically withstand, either because it is wanting inherently or in collateral support, it may become insufficient; this fact is further illustrated in varicocœle, in hæmorrhoids, and in the fine aneurysmal distensions or sacculations met with in certain pathological conditions of the cerebral vessels.

The histological character of the exudate, which follows as a result indirectly of the primary lesion, and the course of the exudate (physiological and pathological), indicating without doubt, its origin in the blood, justify the deduction that its extra-vascular position could only have been reached as the result of pressure—dynamic action; and it is clear that, if pressure caused its extra-vascular position, the exudate or extravasate occurred through the weakest segment of the involved vascular continuity, hence through the capillary walls. Furthermore, as we have seen, the anatomico-physiological conditions which relate to the pulmonary capillaries are most favorable for the development of their insufficiency (first, functional; second, organic or structural); to wit, of themselves they are extremely delicate; they are also, for functional reasons, singularly unsupported, being bounded by air-spaces only; and, on the other hand, the energy which may be developed against them by the circulatory organs and forces, acting through the hydrostatic blood, is most ample to cause this condition, especially when a predisposing state of debility exists in them.

THIRD.—That the remaining claim for this hypothesis is valid; *that acute lobar pneumonia is a dynamic malady* (the term dynamic being understood to include a predisposing adynamia of the pulmonary capillary tissues—their structural asthenia, on the one hand, and the action of an adequate force, dynamia, generated in the functional circulatory apparatus, and applied, possibly spasmodically, through the incompressible mobile blood, on the other) is apparent from the facts of its ætiology in general. As we shall find from a full and careful study of that branch of our subject, there are, besides the more generally acting causes, four quite special classes of conditions which are fruitful, genetically considered, of the disease—all of which affect dynamic conditions, either by contributing to depress the vital resistant tone (local, or general including the local), adynamic, or by favoring, through predisposed spasmodic action, the development of a suddenly acting afferent pulmonary blood-pressure—dynamic. These more frequent conditions are: (1) exposure; (2) degenerate fatty habits, involving structural asthenia; (3) neurasthenic states, including those conditions of nervous depression resulting from confinement, especially where such is punitive, also where depression results from nervous shock, and particularly from the shock of extensive traumatism, especially of major surgical operations (prior to the use of anæsthetics); (4) age. It may be remarked here, in support of a still further claim made, that the first three of these classes refer, as will be readily apparent, to avoidable conditions, and, therefore, they are to a large degree preventable. And, while age itself can not

be classed as preventable, yet even in this the exciting and immediately causal conditions are partly so.

In regard to the question of *exposure*, or the moot question of "the taking of cold," as constituting an active cause for pneumonia, while opinions are strongly opposed on this point, it seems to me they may be reconciled with little difficulty. As we shall see when we come to the study of causes, attacks of this malady are frequent results of taking cold, although those who lead exposed lives are not especially liable to it. A solution of the seeming discrepancy of these observations is to be found by determining what constitutes exposure. The term exposure has unquestionably a relative significance. *It relates especially to the results produced; and these, again, depend upon conditions and powers of resistance of the persons subjected.* This will be apparent from the following:

Persons constantly exposed to the vicissitudes of climate, like sailors at sea in every quarter of the globe, and soldiers in active service, are not subject to pneumonia; while, on the other hand, soldiers in garrison, where there is more seeming protection, are more liable to be attacked than those in the field. Officers in garrison, however, are less liable than the rank and file (von Ziemssen's "Cyclopædia," vol. v, pp. 19 and 26). An explanation of these facts is readily found in the sthenic dynamic conditions engendered and the relative exposure (according to the above interpretation) undergone. Sailors at sea and soldiers in active service become acclimated, dynamic to resist, through the daily services they perform; and climatic changes which would constitute exposure to others less inured are not experienced as such, or as severe, by them. Furthermore, the activity of both kinds of service alluded to conduces to a resistant tone of the tissues, and does not favor a replete blood state—two results which tend to preserve a normal relation, static and dynamic, between the vessels on the one hand and blood-pressure on the other, and, therefore, are eminently preventive of the disease we are studying.

In garrison life, conditions are very different from those in the field, and, as might be supposed, generate very different physical conditions, the result being both dynamically and physiologically predisposing. The rank and file in garrison are not daily exposed, or sufficiently so to acquire the vigor and conditions of physical resistance adequate to constitute a safe dynamic acclimatization, and their idle habits—inactive lives with an ample dietary—conduces to that structural asthenia, replete blood state, and functional and nervous irritability, which render soldiers so environed especially liable to suffer from whatever exposure they may chance to undergo in the occasional, but imperative, sentry and other duties. Hence, while the necessities of an active life cultivate an immunity from pneumonic attacks by exposure, the conditions of an idle, irregular, and indulgent existence conduce to render exposure a more frequent cause of its occurrence; from which it may be seen that dynamic conditions in these cases govern its genesis. That the officers in garrison suffer less than the rank and file from pneumonia is to be explained upon a like interpretation with the above. Officers in garrison are comparatively more engaged, mentally and physically, than common

soldiers, and their physical tone is also improved on account of their superior social advantages, both of which favor a better hygienic state and more normal dynamo-physiological conditions; again, they are less liable to the occasional enforced duty—sentry or picket—which comprises the chances of exposure; hence their immunity.

As a deduction from the above, we may say: While exposure is a prolific cause of pneumonic attacks—as it undoubtedly is in a large ætiological survey—it is so only in an immediate or exciting sense; and its action as such depends upon predisposing conditions. The results of an exposure vary in every case with the capacity of the individual for resistance—with his relatively normal and dynamic states. It is upon the ground of this deduction—incapacity for resistance—that we can explain the occurrence of attacks of pneumonia from even moderate exposure in persons whose tone, structural and nervous, is poor, but whose blood state, as to amount, is normal or full; also upon the same ground of inability to resist its effects—internally determining, driving the blood upon the pulmonary capillaries—are we to account for a quickly developing pneumonia from "taking cold." A person—in whom there is a predisposing physical condition, full blood state with a non-resistant cutaneous condition, and poor structural tone, structural adynamia—takes more than his usual exercise and gets very warm, he sits in a draft and takes cold, and, as a consequence, has pneumonia.

While in the cases given an adynamic state—a condition of delicacy, conjoined with an exaggerated reflex nervous, muscular, and circulatory condition—exists, in another class of cases, where pneumonia develops in the young and full-blooded (as it may from exposure) reflex and sthenic dynamic conditions more likely preponderate; although in these, also, there may be at the moment a lack of normal structural integrity as a predisposing adynamic cause. In another class of cases again structural conditions may be normal; but the reflex conditions are highly irritant, and the blood volume is great; here exposure results in a pneumonic attack through sthenic causes, the action of an adequate blood pressure merely, unaided by adynamic predisposing conditions beyond nervous irritability. Lastly, that dynamic conditions prevail through exposure is evident, on the other hand, from the fact that in the hardy and acclimated no amount of exposure will set up the disease.

b. Degenerate fatty habits or tissue states, including structural asthenia, comprise the second class which illustrates the dynamic character of this pathogenesis. With the fatty degenerate structural state there is usually a co-existing condition of hæmic repletion. These predisposing conditions may or may not be conjoined with a still further predisposing cause—nervo-cutaneous irritability. This class of cases is met with in the good livers and physically indolent (though the latter is not strictly necessary) in our midst.

Though presenting, in one sense, fine physical appearances, these subjects possess no tone, no capacity for resistance or endurance; they are adynamic, and, when from any cause there is created a determination of blood inward, the

impingement of the volume and force so set in motion upon the adynamic capillaries may result in an attack.

c. Neurasthenic states, as set forth, resulting from overwork, great mental strain with anxiety, mental depression, faulty and imperfect nutrition, from confinement, especially with long hours of mental labor, or where such is punitive and, therefore, greatly depressing, and from shock, *particularly as noted of extensive traumatism*, further illustrate the influence of dynamic conditions for its development.

d. It is hardly necessary to more than refer to the only conclusion that one can arrive at, that the asthenia of the aged, the depreciated structural tone of their circulatory apparatus—in fact, adynamia—is the cause of the frequent occurrence of pneumonia in these subjects.

Lastly, that this disease is a dynamic malady is quite conclusively shown by one well-recognized characteristic of its genesis. It has long been observed that the favorite site of a pneumonic process in the class of the disease we are considering, acute lobar, is in the lower lobes of the lungs, but that it is more frequently than elsewhere located in the lower lobe of the *right lung*. This local preference for the action, except upon the hypothetical ground of some unknown depurative, selective action not proved, has not heretofore been explained. As has been shown, the local morbid expression of this disease can not be depurative; its continuous local, not diffuse multiple, expression or manifestation, rendered further conclusive by anatomical and physiological deductions, disproves such an action; and hence a selection of the site resulting from some character of the poison (?) to be eliminated is naturally untenable. The anatomical identity of the lung structure throughout would also seem, of itself, to negate such action.

Although certain morbid processes of a decidedly chronic inflammatory character manifest well-known local preferences of site, notably chronic tuberculosis for the upper lobes of the lungs, yet, as I have shown this process to be non-inflammatory, its most frequent localization can not be accounted for thus on the ground of possible precedence for such action. Furthermore, as this process is decidedly acute, not chronic, and as it does not invariably attack the lower lobes, but may occur in any region of the pulmonary organs, some other influence than any yet suggested must determine the preference of the action noticed; and this I shall show, other things being equal, is dynamic. It is reasonable to conclude that in and throughout the lungs, as in other parts of the body, there may develop a local asthenia, which, under an adequate blood-pressure, will determine the site of the development of a pneumonic process for that locality. But where the tonic resistance is equal throughout the pulmonary capillaries (and it may be everywhere below normal), it is evident that an abnormally developed pressure, spasmodic in character, or tonically sustained, will be felt most, or will act with most effect, upon that area of the capillary circulation or vessels which is located in that line from the source of the energy creating the pressure, which affords the least resistance to the circulating blood, the medium acted upon. Such line from the right heart, and in concordance with the energy of the great moving

blood stream, as the blood enters the pulmonary artery and divides into its different branches, will strike the capillaries of the right lower lobe. This is so, for anatomico-physical reasons. The least resistance is naturally met with in the course of the larger terminal currents, and in that portion of the lungs to which the larger of the related branches of the pulmonary artery tends. According to Gray ("Anatomy and Descriptive Surgery"), the pulmonary artery divides into two main branches, the right and left pulmonaries. The right, longer and larger than the left, divides again into two branches, of which the larger is distributed to the right lower lobe, the smaller being distributed to the two upper right lobes. The right pulmonary, therefore, is not only larger than the left, but its lower division is larger than its upper, which again divides (unequally) to supply the two upper right lobes. The line of least resistance, so far as friction from the vascular walls and divisions of the current by vascular branching are concerned, then, would tend to the lobe most frequently affected—the right lower. But the larger vessels also, in addition, circulate the greater and, therefore, heavier volumes of blood; and, as momentum transmits energy in proportion to the weight of the medium in motion, and as a heavier volume of circulating blood would impinge against the vascular walls with greater pressure than a smaller, this affords an additional reason why, tonic resistance being equal throughout the pulmonary capillaries, the vessels of the right lower lobe should yield first, and become first insufficient under a given adequate pressure. For the same reasons—dynamic, on account of the greater liability of both lower lobes as compared with the upper to be affected by circulatory pressure—both, as derived from a greater momentum and additional *weight* of the blood—we see why the lower lobes are more frequently the seat of pneumonic processes than the upper.

Thus are the several claims for the essentially dynamic character of this malady verified, and the writer's reasons for the truth of the hypothesis, as set forth, given.

That this hypothesis is essentially true will be clearly shown in a subsequent study of the morbid anatomy; and is evident also (1), because it is in itself synthetically, rationally, and logically complete; (2) because upon it, and it only (so far as known), can be explained the otherwise obscure pathogenesis of the affection; (3), because it affords a rational explanation for its varied pathological phenomena, both local and constitutional, and includes, also, as we shall see, ample reasons for the imminent dangers and even the occurrence of sudden death it involves; (4) and lastly, because, as will be shown, it not only affords an ample basis upon which may be constructed an inductively rational therapeutics, but upon it also, as will be pointed out, we are able to explain the beneficial action, extent, and limitation of those remedies and plans of treatment which, at various times and in various hands, have proved useful.

Having determined from the foregoing that in acute lobar pneumonia we have to deal only with what is essentially a dynamic malady, including a local adynamia (structural) and general dynamia (physiological, constitutional), its further comprehension becomes very simple, and its therapeutic management comparatively easy.

THE LOSS OF TENDON REFLEX, NOT SIMPLY ITS ABSENCE, THE SIGNIFICANT SIGN IN LOCOMOTOR ATAXIA.

BY C. H. HUGHES, M. D., ST. LOUIS,

LECTURER ON PSYCHIATRY AND NEUROLOGY IN THE ST. LOUIS MEDICAL
COLLEGE.

BEFORE the Missouri State Medical Association, June, 1869, and published in the "Alienist and Neurologist" for January, 1880, the writer presented an inquiry into the clinical significance of absent patellar tendon reflex, maintaining, among other things in regard to it, that its mere absence was not always of certain diagnostic significance with reference to the existence of posterior sclerosis, and that sometimes its mere absence was apparently of no definite pathological import.

That the sign is not infallible (so infallible as stated by Westphal that its discovery indicates approaching ataxia even before other corroborative symptoms show themselves) may be demonstrated by diligent examination of the tendon reflex responses among a large number of healthy men, in a small per centum of whom it will be found that tendon reflex, like ticklishness, is sometimes *nil* even without apparent pathological facts to warrant. Tendon reflex, too, like sensitiveness to titillation, depends upon states of the cord and nervous system not always organic, and not, in all persons, pathological. It is not our purpose, however, to go over again what we have already once said with reference to this sign, but simply to *emphasize the fact that it is not the mere absence of the patellar tendon reflex that is of significance in posterior spinal sclerosis, but its disappearance in one who has before possessed it*, and that the sign is one of comparative rather than of absolute diagnostic value, and not at all the definite and specially significant one that it has been claimed to be, though it is singularly significant that it is seldom absent in well-established and undoubted locomotor ataxia, except where certain portions of the cord have escaped morbid implication. Since the writing of our paper in 1869, repeated observations have only tended to confirm the views then expressed respecting the value of this sign, and we hope that the subject will not be permitted to rest precisely where Westphal and Erb have placed it, but that observations will be made more extensively upon healthy persons respecting this sign, and upon its behavior in other morbid conditions than sclerosis posterior—non-organic affections of the brain and cord. It will then be found that, as Seguin, McLane Hamilton, L. C. Gray, Jewell, Bannister, and myself have observed, the sign is at least not absolute.

This note recalling attention to this subject has been inspired by two recent cases—one observed during the past week in the person of a patient (sent me by a physician of Texas) suffering from surface hyperæsthesia of the cutaneous distributions of the crural, *especially those distributed to and about the knee joint*, which followed a prolonged and prostrating left sciatico-cruralgia; the other was last month shown me by Dr. Hammond at the neurological clinic of the New York Post-Graduate Medical School in the person of a physician, free, so far as either of us could discern, from

any nervous disease. And in these cases the most thorough attempt failed to elicit the patellar tendon reflex response.

Another case has to-day been dismissed from under my care in which there is no knee phenomenon on the left, and a scarcely perceptible clonus in the right leg. The patient, a miller, aged fifty-six, presented himself with cerebral hyperæmia, impotence, and absent cremasteric reflex, a sign which, by the way, I have found not infrequently in ataxics, and which, when it fails to be elicited by electrical excitation, appears of real diagnostic value in seeking to decide upon the existence of sexual impotence in the male.

If this note shall inspire a rational skepticism as to the absolute infallibility of absent patellar tendon reflex, without implanting undue doubt as to its real importance when *lost by one who has once possessed it*, and who is not under the influence of cerebral states other than those induced by sclerosis which impair or take it away, its true design will be accomplished. To this end inquiries, which we have not now time to make or tabulate, should be further made into the reflex responses of the healthy, the comparatively healthy, and among those who have cerebral trouble with and without sclerosis. An unbiased and extended inquiry will reveal the fact that *absent* patellar tendon reflex is not *the sign*, although *when lost* it is undoubtedly a significant symptom, and points more frequently than elsewhere to posterior spinal sclerosis, as originally contended for by Westphal and Erb, i. e., when other signs of ataxia coexist.

The absence of the cremasteric reflex—it is more difficult to ascertain if it has been lost—presents a symptom confirmatory of diagnosis which justifies testing for it in all cases of suspected ataxia, but we have not time now to digress to its discussion.

1710 CHOUTEAU AVENUE, ST. LOUIS.

A SUCCESSFUL CASE OF PLACENTA LATERALIS.

BY STANLEY P. WARREN, M. D.,

PORTLAND, ME.

THERE appears to be a striking variance in the treatment—theoretical and practical—of placenta prævia between the obstetricians of the modern school of practice and of the past. A recent treatise on midwifery says "most authorities advise the expectant treatment of placenta prævia, partly for the sake of the child's interests and partly on account of the difficulties in inducing labor, due to rigidity of the os." In Playfair's formulas for the treatment of this grave accident of parturition we find: "II. In hæmorrhage occurring after the seventh month of utero-gestation no attempt should be made to prolong the pregnancy," p. 405. Says Lusk: "On theoretical grounds, the induction of premature labor is to be regarded as obligatory, and as soon as the diagnosis of placenta prævia is established, or at least with the occurrence of the first hæmorrhage," p. 559. He quotes Barnes as saying: "If pregnancy have advanced beyond the seventh month, it will, as a general rule, I think, be wise to proceed to delivery, for the next hæmorrhage may be fatal." Accepting, as we do, the high authority of these practitioners, yet "circumstances

alter cases." Gestation may sometimes be permitted to terminate at the natural period, when compliance with the hard and fast rule of delivery at the pleasure of the operator would make good Lusk's remark, that "the *accouchement forcé*, performed with rigid cervical canal, is perhaps, next to doing nothing, the most responsible cause of the mournful results on record."

As a first step in the treatment of placenta prævia, the abnormal position should be established exactly, or to a reasonable certainty. This will, almost as a sequence, predicate the amount of hæmorrhage and the dilatability of the cervix. Now, if the implantation is central, there would seem to be no question as to the propriety, nay, urgency, of active interference. All risks of shock, laceration, etc., from forcible manipulation are practically less to be feared than the impending flooding. But when the case is one of "placenta marginalis," there are sometimes factors that will tip the scale in favor of procrastination—such, I suggest, as are attended by small and infrequent hæmorrhages, that begin in the last month, with healthy constitution, and nearness of residence to the physician. When such conditions obtain, and especially when with these there is a vertex presentation, delay may be safer to child and parent than forcible dilatation and version.

Among the surprising things of medical practice is the frequency with which placenta prævia comes to the obstetricians. A friend in active professional life thirty years has never met a case: another found it in his first patient. After ten years of obstetrics, it has lately occurred to me. Nothing is so futile as to reason from one case; nevertheless, when added to others, their sum can be utilized in the induction of warrantable inferences.

The patient is of American birth, in the middle class of life, thirty years old, perfectly healthy, and the mother of six children. During the present gestation she has differed in no way from her usual mode of life—the care of her home and children—except in using the sewing-machine more than usual. She expected her delivery October 11th, though by professional computation—"count back three months and add seven days"—it should occur October 17th. On the afternoon of September 27th, just four weeks from the actual delivery, vaginal hæmorrhage began, without pain or evident cause, saturating three or four napkins. I found her soon afterward still flowing, though the amount was steadily lessening. Careful examination showed the following condition: *Per vaginam*, cervix an inch long, admitting the index-finger, the anterior cervical segment hard and resistant, the rest of the neck flaccid, cephalic presentation, position not defined. Externally, by palpation, the uterus reached the sternum, the contour of the fœtus was readily outlined, there was little amniotic fluid, the head was in the left groin. By auscultation, the foetal heart was heard at middle left side of the uterus, 144. The so-called placental souffle was heard most distinctly on the right, low down, about the level of the pelvic brim, and gradually disappeared upward. Diagnosis, placenta partialis, fœtus in left occipito-anterior position. She was directed to stay in bed and to take an enema of 40 ℥ of laudanum once in three hours. If hæmorrhage recurred, to summon me at once. Forty-eight hours afterward there was a second hæmorrhage, small, and with no uterine contractions perceptible. I was not notified of this one until a third bleeding occurred, on the evening of the next day. I ascertained that the hæmorrhage was about as much as at the first, the cervix

unchanged, no true labor-pains, and the patient wished to "get up and go to work." As she was still flowing a little, I tamponed the vagina firmly through Sims's speculum. Having another confinement that night, I was detained, so that I did not visit her until the evening of the next day. After the tampon had been tolerated nearly twenty hours, she herself removed it, and there had been no recurrence of the flow. She was absolutely free from pain, and the uterus was unchanged in condition, the pulse was full at 78, no rise of temperature, and no symptoms of exhaustion. After consultation, it was decided, in view of the existing state of affairs—little and infrequent hæmorrhage, the certainty of shock in forcibly dilating the cervix, soft on one side, hard on the other, and the generally excellent condition—it was the part of wisdom to preserve a "masterly inactivity." This was on October 2d. She resumed her daily routine work, and did not flow any until October 21st, then only staining two napkins. October 25th, while at supper, she felt a sudden gush of blood, that soaked through her clothing, fainted from nervous shock, and went at once to bed, where I found her in an hour's time. There had been hæmorrhage enough to saturate the bedding about as much as we usually find it at the end of a natural delivery, and there was then a trickle of bright blood. The neck was effaced, the os open about two inches, dilating pains severe and nearly constant, the head presenting and firmly applied to the lower uterine segment, membranes unruptured, the edge of the placenta could be indistinctly felt within the orifice, and thin clots were between the uterus and membranes. As dilatation progressed, the bleeding entirely stopped. At ten o'clock, four hours from the beginning of labor, the os having nearly fully opened, I ruptured the membranes. No water escaped. In six or seven pains the babe was expelled, having the cord wrapped once about its neck, somewhat cyanosed and feeble, but there were soon evidences of vigorous life. The offending placenta was expressed manually, and compression kept upon the uterus by my hands for an hour. Contraction was most thorough, indeed almost tetanic in character, and there was very little flowing after the placenta was removed. For several hours there were moderate after-pains, which I do not think were due to internal coagula, for none were afterward expelled. Lactation was perfectly established at the third day, temperature, pulse, and lochia were normal the fourth morning, and there has been a perfect convalescence. She says that she had an easier labor than any preceding.

The placenta was of usual size, the cord was implanted in its upper third, while its lower third presented a unique appearance. It was smaller than the part above, the constriction beginning abruptly, firm and bloodless, looking very much like an old, well-worn sponge, and was evidently the result of long-continued, peculiar compression. The attendants noticed at once its unusual appearance, and accepted readily the explanation given.

One or two points in the history of this fortunate case are, to me, worthy of especial notice. 1. The small amount of flooding proportionate to the large amount of detachment. Fully one third of the placenta was altered in size and macroscopic appearance, and the atrophy seemed to have existed for some time, judging from the bloodless, non-succulent tissue. There must have been a sudden rupture of large sinuses just before actual labor, for the hæmorrhage then was more than the entire loss in the preceding ones.

2. The unusual vigor and efficiency of the dilating pains. Lusk says: "During the first stage the pains are apt to be feeble and dilatation tardy," p. 556. Playfair: "Provided the pains are sufficiently energetic, Nature may be capable of stopping the flooding without artificial aid. It

is but rarely that she can be trusted for the purpose," p. 399. In the case reported, the pains of the first stage were nearly without intermission, and the os was fully dilated in three hours. By their influence the hæmorrhage was speedily arrested which was so profuse at the beginning of labor, and this well demonstrated the opinion that good uterine contraction is a sufficient hæmostatic.

3. Again, the worth of manual compression of the emptied uterus is shown by the slight post-partum bleeding. This re-enforcement of natural uterine action was begun as soon as the child emerged from the vulva, continued for an hour, and, by its aid, the womb took on an almost stony hardness. No ergot was given at any time in the history of the case. The behavior of the uterus, in this and preceding patients, when no ergot was used, contrasted with those to whom it has been administered, convinces me that manual compression, thoroughly carried out, is as efficient in preventing post-partum hæmorrhage as ergot, and without its dangers.

4. A fourth point is the failure of the tampon to induce labor. The vagina was thoroughly packed, through a Sims's speculum, with cotton pledgets, which, though effectual as a hæmostatic, entirely failed to bring on the labor. It might have resulted differently if a sponge tent had been inserted into the cervix; and, indeed, a similar failure has often occurred to me when the vaginal tampon alone has been applied in abortious. It goes to show that merely a vaginal tamponade can not be depended upon to arouse uterine contractions.

5. Regarding the so-called "placental souffle," Playfair remarks: "The non-placental origin of the sound is sufficiently demonstrated by the fact that it may be heard for a considerable time after the expulsion of the placenta," p. 148. "Its position (the uterine souffle) can not be taken as a safe guide in determining the situation of that viscus" (placenta), p. 149. "The accuracy of our diagnosis may be confirmed in doubtful cases by finding that the placental bruit is heard over the lower part of the uterine tumor," p. 396. However we may reconcile these seemingly contradictory statements, and whether or not the uterine souffle does indicate, physiologically, the site of the placenta, still, as a matter of fact, in this patient the sound was heard most distinctly at the point where the afterbirth was situated, that attachment being established to be lateral by the examining finger and by its own configuration.

RUSSIAN VAPOR-BATHS

A CURE FOR BLOOD-POISONING.

BY TRUMAN S. SUMNER, M. D.

ON November 11, 1879, Professor Howe transfused eight or nine ounces of blood in the case of Mrs. B., exhausted from profuse bleeding after miscarriage at the third month. (See the "New York Medical Journal," vol. xxxii, p. 152.)

It fell to my lot to nurse the lady exclusively for twelve or fifteen days. By frequent enemata of fresh bullock's blood, and the juice of raw beefsteak by the mouth, her vitality was so increased by the next day that a second transfusion was unnecessary. Several abscesses formed

where the hypodermics of ammonia, brandy, and morphine had been given, due to such a low condition. I was poisoned in dressing these, or in using the vaginal injections, through a wound on the thumb; I lost the nail, had a phlegmonous abscess on the forehead, several styes, and a dry, harsh skin. The prognosis seemed very unfavorable. I was advised to go to the Hot Springs of Arkansas, but, having been an occasional visitor at the Lafayette Place Russian Baths, I knew that the relief needed could be found in their soothing vapor and sweat-producing, dry hot-air rooms. After a few weeks' daily bathing the barber noticed a marked change in my hair: that it was softer and oily, and our attendant remarked the healthy action of the skin, which had lost its dry, dead condition—in other words, every pore was doing its duty, perspiring readily at 110° and 140° F.

As is well known, healthy perspiration is never weakening; the loss of tissue is quickly made up by abundance of nourishing food. Thus the fluids of the body that have been drained off are supplied, its solids are maintained, and the standard of the physical strength is not only kept up, but increased by combined healthy exercise, pure air, and good nourishment. The appetite being rendered vigorous, the food taken is rapidly assimilated, and the body is really and ultimately strengthened. In fact, this system of bathing is the blissful cause of exciting a harmonious working of all the functions of the external and internal economy of the body.

Encouraged by a few weeks' daily bathing, I accepted a position in the electric department, and continued this systematic sweating daily for a year, the entire process lasting about an hour each time.

The first step was an exposure of about fifteen minutes to a temperature of 110°, reclining on marble slabs or walking around the spacious chamber at pleasure, using a sponge dipped in cold water on the head, at first, when it was a difficult matter with my dry skin to perspire freely, or tepid showers to relieve this dryness and hasten the sweating. Then a scrubbing with soap and brush, followed by a tepid shower, removed all the debris and admitted of a pleasant stay of ten minutes in the soothing vapor-room at 116°; then a dip into the Croton or the artesian plunge at 65° would exhilarate the system, and permit me to lounge for another ten or fifteen minutes in the dry-air chamber at 140°. Occasional sprays from the needle-bath of cold water would freshen up the system and bring about a good reaction. Some bathers prefer a cold shower or spray to the plunge; the result is the same, only a few more showers are needed in cooling off. When free perspiration has been attained, and a good reaction can be felt tingling the skin all over with a glow following a cold shower or plunge, then a dry rub or shampoo, at the hands of an attendant for a few minutes in a room at 75° or 80°, places the skin in a good condition to receive oxygen freely while reclining on a couch under a sheet, or leisurely dressing.

Twelve months of this treatment, with cod-liver oil and good diet, brought me up to my normal standard. The past two years I have taken three or four baths a week with great comfort, and shall continue one a week for the preservation

of my health. With me this system of bathing had the diversity of travel, as I was thrown with an intelligent, good-natured class of people, some in search of health, others of pleasure. All thoughts of the sick-room vanished amid this atmosphere of cheerfulness.

If the patient will use this bath with diligence and care, he will prolong his life, fortify his body, diminish his ailments, augment his enjoyments, and improve his temper; then, having found something beneficial to himself, he may be prompted to do something to secure the like for his fellow-creatures. Hence this article.

507 CLINTON STREET, BROOKLYN.

Clinical Reports.

VIENNA POLIKLINIK.

CLINICAL REMARKS ON DISEASES OF CHILDREN,

By PROFESSOR ALOIS MONTI.

October 12, 1883.

Congenital Cyanosis.—Bronchial Catarrh.—Aphthous Stomatitis.

CASE I.—You have here, gentlemen, a child which, from the mother's account, has been cyanotic from its birth. He is four years old, yet he is scarcely as large as a child of two. On careful examination, you see the marked blueness of the face, particularly of the cheeks. Even the tongue and mucous membrane of the nose and mouth are blue; hence this is a general cyanosis, not confined to the skin. The hands are congested, and there is a peculiar swelling of the tips of the fingers and toes.

When the child cries there is a general venous congestion. This is a very striking and interesting case, but the interest does not lie in the cyanosis alone. The child is unable to walk or talk; his head is abnormally small—in fact, microcephalic; the fontanelles are not yet closed. The penis is only as large as that of a new-born infant. The testicles are present, but are remarkably small. In short, the child is an idiot. This is undoubtedly a disease of the circulatory system, and probably some defect of the heart. It must be *congenital*, for not otherwise could such extreme cyanosis result. By careful percussion, I find that the heart is not enlarged. This is very important, for in acquired heart disease the heart would be enlarged, while in this case, on the contrary, it actually seems to be rather smaller than normal. The apex-beat is not definitely located. On auscultation, you will hear a loud, blowing systolic murmur at the base. Hence we must infer, first, that there is no enlargement; secondly, that the apex-beat is diffused; thirdly, that the ventricular tone is normal, and, lastly, that there is a systolic murmur at the base. Both pulmonic sounds are accentuated, and there is a blowing murmur with the first aortic sound. Now, I would ask, What have we here? Is this a case of open foramen ovale, of congenital pulmonic, or aortic defect; is the septum wanting, or does the ductus Botalli remain patent? We can not definitely say; all that we can tell is that there is a murmur at the base, which may be due to an open foramen ovale, or to a defective septum. The former is more probable. For us, as practicing physicians, it is enough to say that the child has some congenital defect about the heart. The anomalous appearance of the head and sexual organs is interesting, but this has no connection

necessarily with the other conditions. The prognosis in these cases of cyanosis is most unfavorable. Such children usually suffer from bronchial catarrh, and are liable to die suddenly from acute congestion within the first four or five years of life. As to the prognosis in the present case I need say nothing; it is very bad. We can do but little in the way of treatment except to give tonics, regulate the diet, and administer stimulants as required.

CASE II.—This child has a cough, and, as the mother says, seems to suffer from pain in the abdomen. It is not unusual in pneumonia, either of the upper or lower lobe, for the pain to be referred to the belly. In pleurisy in children the hypochondrium is generally the seat of pain. By further questioning I find that two days ago the child suffered from pain in the breast, and dyspnoea. On examination, you see that the face is pale, the general surface temperature somewhat elevated. The respirations are not much accelerated, and there is a slight cough. Auscultation of the right back shows roughened respiration, with moist râles; the same is heard on the left side. You see that I listen to the chest first because the child begins to cry if I percuss. I also employ immediate auscultation, as children are less terrified than if they see a stethoscope. Many different instruments have been devised. We use here a stethoscope invented by Rousseau, which has a small rubber bulb attached to the mouth of the instrument, so that the air can be exhausted. Two long, flexible rubber tubes connect it with the ears. The advantage of the instrument is that it adheres to the skin and is not detached by the child's uneasy movements. As I said before, we find here roughened respiration and râles, but without dullness on percussion. Hence this is a catarrh of the bronchi. It is important to decide whether the large or small bronchi are affected; if the small, the respirations will be very frequent. This is not the case here. The respirations will be labored in capillary bronchitis, and there will be movement of the alæ nasi with action of the muscles of the neck. This symptom is also absent in the present case. The treatment is simple. The child should be kept in bed and have its chest enveloped in wet compresses. There is no specific treatment. You can give some simple expectorant, and, if there is elevation of temperature, a teaspoonful of salicylate of sodium (a five-per-cent. solution) may be given every three hours as an antipyretic.

CASE III.—This is a case of aphthous stomatitis. It is a disease most often seen in summer, and seems to be due to some fermentative process. It is often preceded by a considerable elevation of temperature (39° – 40° C. [= 102.2° – 104° F.]), leading to the inference that pneumonia is threatened. Then comes salivation, attended with heat, redness, and swelling of the buccal mucous membrane. The child loses its appetite simply because the presence of food in the mouth causes pain. After twenty-four hours the fever declines, and, simultaneously, small vesicles appear on the mucous membrane of the lips, tongue, and gums. On the first day five or six vesicles are seen, on the second as many more, and so on. By confluence of these, large pustules are eventually formed. In this case you can see all of these different stages. Salivation is present. Here are vesicles on the lip and tongue, and on the roof of the mouth is a large purulent spot. This is not diphtheria, but confluent aphthous stomatitis. The child infects itself through its saliva, and, in a family where several children use the same glass or spoon, the disease spreads. Hence aphthous stomatitis is infectious. The prognosis is favorable, though, if the affection lasts for twelve or fourteen days, the child may become emaciated through loss of sleep and appetite. In some cases the larynx may be affected, leading to œdema of the glottis, and a consequent diagnosis of diphtheria.

The treatment is simple. Attend carefully to the diet, giving nothing but cold milk until the soreness of the mouth decreases. In no disease is the application of cold more useful. Give the child small pieces of ice, or syringe out the mouth with ice-water. This treatment, according to my experience, shortens the attack. Mouth-washes are often applied with a rag or brush, but wrongly so, for every mechanical injury is harmful, and, by roughly rubbing the mucous membrane, suppuration is induced and the disease prolonged. A solution of chlorate of potassium (1 to 100) may be given in doses of a teaspoonful every two or three hours. This has only a local effect, the idea that it acts through the blood being erroneous. The mouth may be syringed out with a similar solution every four hours. Benzoate, or salicylate, of sodium (a five-per-cent. solution) is also useful. A solution of corrosive sublimate (1 to 500), applied with a camel's-hair brush to the gums, causes a rapid dulling of the sensibility in cases where the pain is great. The separate spots may be touched with the solid stick of nitrate of silver. It is too painful when the whole mouth is thus penciled.

Book Notices.

A Treatise on the Diseases of the Eye. By J. SOELBERG WELLS, F. R. C. S., etc., Professor of Ophthalmology in King's College, London, etc. Fourth American, from the Third English Edition, with Copious Additions. By CHARLES STEDMAN BULL, A. M., M. D., Lecturer on Ophthalmology in the Bellevue Hospital Medical College, etc. Illustrated with 257 engravings on wood and 6 colored plates, together with selections from the Test Types of Professor E. Jaeger and Professor H. Snellen. Philadelphia: Henry C. Lea's Son & Co., 1883. Pp. xix-83 to 846, inclusive.

This treatise is already well and favorably known to the profession, and it seems only necessary to indicate the alterations made in the present publication. For these the American editor is altogether responsible, as there has been no more recent English edition which he could draw upon. The most striking difference that we have noticed in a cursory comparison of the two editions is the change made in the arrangement of the topics. Dr. Bull has evidently endeavored to bring the subjects into a more logical and more natural order than that in which they were considered by Mr. Wells, and his alterations in this direction have, we think, been judicious. Thus, Diseases of the Lachrymal Gland are now placed in their appropriate position in the beginning of the book, while Diseases of the Sclerotic have been placed with those of the Cornea, and Diseases of the Ciliary Body along with Affections of the Iris. Again, Diseases of the Choroid and the subject of Glaucoma precede, as they do naturally, the discussion of Cataract and other lesions of the lens. The affections of each part are now, therefore, taken up in the anatomical order, proceeding from without inward. The chapter on the Use of the Ophthalmoscope is relegated to the end of the work. It seems to us that it would have been rather more appropriately inserted in the beginning, along with a description of the other methods of examination.

With regard to the more important additions, we may point to the description of Carnalt's perimeter and of the treatment of scars of the face by kneading, the account of Landolt's method of blepharoplasty, the new matter on the subjects of sympathetic ophthalmia (p. 340), upon the nature of glaucoma (p. 405), ophthalmic migraine (p. 540), and the course of the optic-nerve fibers (p. 585). The section on Ophthalmia Neonatorum has

been entirely rewritten, and those upon Diphtheritic and Membranous Conjunctivitis are nearly all new matter. In addition, there are many minor insertions scattered throughout the book, together with much that is new in the way of bibliography.

Altogether, we can say of this what is so commonly, though often so untruly, said of new editions, that it is both "revised and improved," for the additions enhance the value of a book already valuable to ophthalmic specialists.

A Manual of Practical Hygiene. By EDMUND A. PARKES, M. D., F. R. S., late Professor of Military Hygiene in the Army Medical School, etc. Edited by F. S. B. FRANCOIS DE CHAUMONT, M. D., F. R. S., etc., Professor of Military Hygiene in the Army Medical School. Sixth Edition, with an Appendix giving the American Practice in Matters relating to Hygiene, prepared by and under the supervision of FREDERICK N. OWEN, Civil and Sanitary Engineer. Vol. I. New York: William Wood & Co., 1883. Pp. xv-368. [Wood's Library of Standard Medical Authors.]

This well-known work is at last reprinted in America as one of Wood's Series of Standard Medical Authors, and the first volume, in its typographical appearance, is a great improvement on former English editions, and is free from the numerous errors that disfigured them. When the second edition of Parkes's "Hygiene" was reviewed in this journal (vol. iv, p. 131), it was stated that the book was not excelled by any work on the subject then extant. It was never intended as a complete philosophy of hygiene in its broadest sense. It was originally designed as a manual for army officers, to guide them in their duties as military sanitarians; but subsequently the book was somewhat enlarged in scope, in order to adapt it to the needs of civil life, but it never fully met those needs, although, on the death of Dr. Parkes, he was succeeded by the able and versatile De Chaumont. In the revision before us, of which the present volume is the first installment, it is proposed to omit such matter as has become obsolete, and to incorporate such additional topics "as the progress of science and the results of experience rendered it desirable to add." This promise has been faithfully carried out in the first volume, so far as the military hygienist is concerned, but there is still room for additional topics of interest to the civil medical officer. What the American editor is likely to add is still a matter of conjecture, although in the title-page it is stated that the Appendix will give the "American practice in matters relating to hygiene," which would seem an ample field in which to work—if there is any such thing as a practice of hygiene peculiar to America—but, whether our fellow-countryman add much or little to this book, it at this date still remains, in its peculiar field, the best work on practical hygiene extant; and when it is remembered that the world has no lack of works on hygiene, from Hippocrates down, the full measure of what we mean to say will be apparent. Other works we have in mind having each their points of excellence, but of this one we may say, take it "for all in all," we "shall not look upon its like again."

The Principles and Practice of Medical Jurisprudence. By the late ALFRED SWAIN TAYLOR, M. D., F. R. S., etc. Third Edition. Edited by THOMAS STEVENSON, M. D. Lond., F. R. C. P., Lecturer on Medical Jurisprudence and on Chemistry at Guy's Hospital, etc. Philadelphia: Henry C. Lea's Son & Co., 1883. 2 vols., pp. xx-727; xiv-657.

TAYLOR's treatise, at the hands of Dr. Stevenson, has undergone a diminution of bulk with an increase of mass. Diffuseness has given place to concentration, and the matter itself has been added to. These were needed changes. The editor observes in the preface: "In one respect I have thought it right

to tone down and curtail materially Dr. Taylor's language. I refer to that portion of the work dealing with the relations of medical witnesses to the bar. However truthfully the author's lively descriptions may have represented scenes in court between witnesses and barristers as they appeared to his mind, I felt that they were no longer applicable at the present day."

The most important accessions and alterations are found in the chapters on Poisoning, which "have been in some parts entirely rewritten." The case of *Reg. vs. Lamson* and the interesting toxicological considerations which arose out of it have been incorporated.

This edition only reasserts with stronger reason the allowed claims of the late Dr. Taylor's work to the first position among English books of its class. Including within its purview, as the subject does, something from every division of medical science, this exhaustive treatise will ever remain an invaluable collection of data. It may be remarked also that many of the cases cited are of great usefulness as disciplinary lessons in deductive reasoning.

The Treatment of Wounds: its Principles and Practice, General and Special. By LEWIS S. PILCHER, A. M., M. D., Member of the New York Surgical Society. With one hundred and sixteen Wood Engravings. New York: William Wood & Co., 1883. Pp. xii-391. [Wood's Library of Standard Medical Authors.]

In the opinion of the reviewer, this book is destined to secure a very large sale, for it is one of the few that one finds pleasure in welcoming to the table. Logical, painstaking, and careful, it brings under the eye, within a modest compass, the latter-day teachings concerning the treatment of wounds, and while, owing to the nature of the subject, it is not likely to live forever, yet a long time will elapse before it will have a successful rival. As the book treats of the topic now uppermost in the minds of surgeons, it is most timely for those who wish to keep pace with the progress of this branch of medical science without the weary task of searching the journals for the facts here ready collated to their hand. Moreover, unless one is somewhat skilled in such researches, he will find himself burdened with much rubbish, which it will puzzle him to turn to account; so that, when a field has been found gleaned by so skillful a hand as Dr. Pilcher's, the labor might as well be saved, and the result accepted. Without any question, this is one of the best books on the treatment of wounds yet published, and, although we notice an omission or two, yet they are so trifling that it would seem invidious to detract from the merits of the work by mentioning them.

Quain's Anatomy. Edited by ALLEN THOMSON, M. D., D. C. L., LL. D., F. R. S., etc., EDWARD ALBERT SCHÄFER, F. R. S., etc., and GEORGE DANCER THANE, Professor of Anatomy in University College, London. Ninth edition, two volumes. Nearly 1,200 engravings, of which 97 are colored. New York: William Wood & Co., 1882. Pp. xiii-747; ix-947.

This classical work has been subjected to most thorough and painstaking revision, and many additions have been introduced without materially altering the form of the book. It still has its familiar look. Professor Thane's revision is seen in the first volume, in which the figures show the blood-vessels colored. A chapter has been added on superficial and topographical anatomy. The new work on the second volume has been done largely by Mr. Schäfer, embracing the histology and special anatomy of the viscera, and Dr. Thomson has contributed the entire chapter on embryology. Considerable changes have been made in the histological matter and in the section on the cen-

tral nervous system, and Dr. Thomson's chapter on embryology may be called a treatise in itself, in which deserved prominence is given to Foster and Balfour's researches.

There are several text-books that may serve well enough for those who simply aim at memorizing the dry facts of anatomy, but Quain's is the only work we know of in the English language from which the *science* of anatomy can be learned. It has always been a favorite with students who were really fond of the study.

Anatomy, Descriptive and Surgical. By HENRY GRAY, F. R. S., etc., Lecturer on Anatomy at St. George's Hospital Medical School. With an Introduction on General Anatomy and Development, by T. HOLMES, M. A. Cantab., Surgeon to St. George's Hospital, etc. The Drawings by H. V. CARTER, M. D., late Demonstrator of Anatomy at St. George's Hospital. With Additional Drawings in Later Editions. Edited by T. PICKERING PICK, Surgeon to St. George's Hospital, etc. A new American from the Tenth English Edition, to which is added "Landmarks, Medical and Surgical," by LUTHER HOLDEN, F. R. C. S. With Additions by WILLIAM W. KEEN, M. D. Philadelphia: Henry C. Lea's Son & Co., 1883. Pp. 1,023.

So far as the body of the work is concerned, we are unable to see that this is an improvement on preceding editions, although it presents a handsomer appearance than former American editions. In view of all that has been published of late years on the topographical anatomy of the pelvic contents in the female, it is somewhat surprising that such a cut is retained in the book as that which is to be found on page 899. Mr. Holmes's introduction, on General Anatomy and Development, is the gem of the volume, and the incorporation of Mr. Holden's "Landmarks, Medical and Surgical," certainly adds to its practical value.

The Essentials of Bandaging; with Directions for Managing Fractures and Dislocations, for administering Ether and Chloroform, and for using Other Surgical Apparatus, and containing a Chapter on Surgical Landmarks. Illustrated by one hundred and thirty-six Engravings on Wood. By BERKELEY HILL, M. B. Lond., F. R. C. S., Professor of Clinical Surgery in University College, etc. Fifth Edition, Revised and Enlarged. New York: J. H. Vail & Co., 1883. Pp. xiii-341.

MR. HILL's little book is somewhat pretentious, for it includes not only bandaging proper, but the treatment of fractures and dislocations, directions for administering ether and chloroform, and "for using other surgical apparatus," and a chapter on surgical landmarks. There is little change from previous editions, nor does there appear sufficient reason for extracting these topics from the regular treatises on minor surgery; but, as the book has reached its fifth edition, it is evident that, for some occult reason, it has met a popular want. The chapter on Surgical Landmarks is especially good. The illustrations are fairly well done, although it would appear that a more recent pattern of aspirator might have been figured than the one on page 190.

The Roller Bandage. By WILLIAM BARTON HOPKINS, M. D., Surgeon to the Out-Departments of Pennsylvania, Episcopal, and University Hospitals, etc. With seventy-three Illustrations. Philadelphia: J. B. Lippincott & Co., 1883. Pp. 95. [Price, \$1.25.]

In this book there is no attempt to go beyond the scope of the topic indicated in the title, "The Roller Bandage." Directions are given clearly and in full for the application of all

varieties of bandages that may be made from a roller. There are seventy-three illustrations, most of which, unfortunately, do little credit either to the artist or to the engraver. This is the more unfortunate, as the text is carefully written.

BOOKS AND PAMPHLETS RECEIVED.

A Treatise on Syphilis in New-born Children and Infants at the Breast. By P. Diday, ex-Surgeon to the Hospital de l'Antiquaille, Lyons. Translated by G. Whitley, M. D. With Notes and an Appendix by F. R. Sturgis, M. D., Professor of Venereal and Skin Diseases in the New York Post-graduate Medical School, etc. New York: William Wood & Co., 1883. Pp. xii-310. [Wood's Library of Standard Medical Authors.]

A Treatise on Bright's Disease of the Kidneys: its Pathology, Diagnosis, and Treatment. With Chapters on the Anatomy of the Kidney, Albuminuria, and the Urinary Secretion. By Henry B. Millard, M. D., A. M. With Numerous Original Illustrations. New York: William Wood & Co., 1884. Pp. xiv-246.

Extensive Fracture of the Pelvis, and other Severe Injuries to the Body; Recovery. Suit brought to Recover Fee; Malpractice set up as an Offset; Judge's Charge to the Jury; Judgment for the Plaintiffs. Reported by J. E. Markle, M. D., Winchester, Ind.

Delayed and Non-Union of Fractures. By N. Senn, M. D., Milwaukee, Wis. [Reprint from the "Weekly Medical Review."]

Infusion of Jequirity, or Licorice Bean, in Inveterate Panus, with a Report of Several Successful Cases. By Edward S. Peck, M. D., Surgeon to the Eye and Ear Department of the Northwestern Dispensary, etc. [Reprint from the "Medical Record."]

A Case of Severe Purulent Inflammation of the Middle Ear with Restoration of the Drumhead; Consecutive Dentalgia without Caries. By Edward S. Peck, M. D., Ophthalmic and Aural Surgeon to Charity Hospital, New York. [Reprint from the "Independent Practitioner."]

An Examination of Some Controverted Points of the Physiology of Voice, especially the Registers of the Singing Voice and the Falsetto. By T. Wesley Mills, M. D., L. R. C. P., Assistant of the Professor of the Institutes of Medicine, McGill University, Montreal. [Reprint from the "Journal of Physiology."]

Correspondence.

LETTER FROM VIENNA.

The Lecturers in the Winter Course.—Billroth's Clinic.—Obstetrics and Gynecology.—Pathological Anatomy.

VIENNA, October 20, 1883.

ONE need only glance at the bewildering array of notices upon the hospital bulletin-boards to infer that the winter work has fairly begun. New courses are starting up on every side, until one is fairly appalled at the possible number of specialties into which medicine may be divided. But while these increased opportunities for a choice are apparently one of the greatest advantages of Vienna, in reality they are often a serious embarrassment to the fresh-comer, who finds it hard to decide which courses will be the most profitable. It is very unfortunate that every American must learn by experience, and probably throw away not a little of his time and money, before he discovers what instructors are really worth listening to. A man's friends can help him to some extent, but so diverse are the ideas with

regard to different lecturers that it is impossible to judge of their merits until one has heard for himself. But, in general, it is pretty safe to infer that if there is anything good to be picked up there will be a crowd of our countrymen on hand. On the contrary, it is rather amusing to see some men listening daily to very ordinary lectures, and taking careful notes, simply because the lecturer is a German professor, and the place Vienna, forgetting that they have heard just as profitable (and more intelligible) discourses at home. It takes a man several months here to discover that, the more an instructor inclines toward didactic lectures, the less valuable is his course.

The semester has opened favorably, with a fair number of students. There are but few changes in the faculty. Arlt has retired on a pension, being succeeded by Stellwag, and the latter's place is filled in turn by Professor E. Jaeger. Of the different departments, that of Professor Kaposi is, as usual, popular, especially with Americans.

Neumann, in syphilis, and Monti, at the Poliklinik, in children's diseases, have a good following. Ultzmann, in genito-urinary diseases, is always a popular lecturer with foreigners, and deservedly so, not only because of his lucid style, but from the practical character of his instruction.

I have seen Billroth operate—did I say *seen*? I stood behind a crowd of students and caught occasional glimpses of that celebrated surgeon, almost swallowed up in the throng of his assistants. The German idea of an operating theatre would indeed be a peculiar one if the narrow, cramped, ill-ventilated rooms in the hospital were to be taken as a type. Not to speak of the impossibility of the hapless spectator seeing anything of the operation (such is the number and such the *eagerness* of the assistants), the foul air forces him to think that bacteria are living realities. I would not lead your readers to infer that I am trying to depreciate Vienna surgery. All who have been here will acknowledge that its study must be pursued under some difficulties. As to gynecology, I am not prepared to say much from personal experience. The courses, as everybody knows, are conducted at the hospital and dispensaries, on the same general plan as in New York. This is not the place in which to refer to treatment. We, in America, have an idea that our peculiar methods are not known, or, if known theoretically, not properly applied by the Vienna school. To what extent this is true I hope to be able to state at length hereafter. One thing is certain, that there is no divorce of gynecology and obstetrics, but the all-important prophylactic against diseases of women, care during confinement, is thoroughly understood and appreciated. Professor Carl Braun holds a clinic daily, at which he either operates or shows interesting cases. Most of his laparotomies are performed in the public lecture-room.

It is hardly necessary to dwell upon the topic of Vienna as a place for pathological study, since it is generally known what the opportunities are. The material is certainly enormous, and it is rather significant that few men come here with the express purpose of studying morbid anatomy. There are some fair demonstration courses, but the difference between a careless and a careful autopsy represents the essential difference between the pathology of Vienna and that of Berlin. A beginner will not find it to his advantage to "form his style," so to speak, by watching post-mortems here. After all, it is difficult to characterize Vienna as a center of medical study. Opinions with regard to its advantages are as various as the students who come hither. Some of the more experienced, who, by reason of long residence and liberal donations, have come to enjoy peculiar privileges with the assistants, think that it is unsurpassed, while others among the uninitiated (or more economically inclined) are not so enthusiastic. As I said before, every one must see and judge for himself.

THE
NEW YORK MEDICAL JOURNAL,
A Weekly Review of Medicine.

Published by
D. APPLETON & Co.

Edited by
FRANK P. FOSTER, M. D.

NEW YORK, SATURDAY, DEC. 1, 1883.

THE ANNUAL REPORT OF THE SURGEON-GENERAL
OF THE ARMY.

A PAMPHLET of very moderate dimensions suffices for a synopsis of the work of the medical corps of the army during the fiscal year ending June 30, 1883, but it is ample when we take into account the great volumes of other matter that are issued from the Surgeon-General's office at short intervals, embodying the more detailed scientific data of the office. The document is dated October 15th, and is signed by Acting Surgeon-General Huntington, although, as he states, its preparation was actually completed by the late Surgeon-General Crane.

A summary of the sick-list reports shows that the proportion of men under medical treatment during the year was greater than during the preceding year, and also greater than the average decennial rate. The death rate was ten in a thousand of mean strength, being equal to that of the previous year, but less by two and seven tenths in a thousand than the average for the preceding decade. Nevertheless, the proportion of deaths from all causes to the number of cases treated is stated to have been increased, both over that of the year before and over the average for the decade. Unless we misinterpret the statements made in the report, there is a discrepancy in these figures which we are unable to reconcile with the possibilities of the case. They relate solely to the white troops, but those in regard to the colored troops are of the same general purport.

Diseases of the respiratory organs were the cause of the greatest number of deaths, and it is to be regretted that their prevalence has to be imputed in great measure to the insufficient ventilation of barracks and dormitories. Notwithstanding the fact that only two fatal casualties from actual warfare were reported during the year, injuries stand second on the list of causes impairing the effectiveness of the army, far exceeding in proportionate number those for the German and the British armies, and going to show the extent to which our soldiers are subjected to laborious and dangerous employments in the line of duty. Perhaps this very fact, in connection with the trifling share of garrison duty in and about large towns that falls to his lot, accounts in great measure for the freedom of the American soldier from venereal diseases as compared with the men of the British army. However, the contrast is quite striking, the rate being one hundred and seven in a thousand higher for the British army than for our own—and that, too, in spite of the fact that the British medical officers report only cases in which hospital treatment is given, whereas our own reports cover all cases in which treatment of any sort is employed. Very much to the credit of the colored troops, it is noted that the proportion of sickness from the use of alcoholic drinks is small among them.

On the other hand, the blacks seem largely affected with diseases of the nervous system, the preponderance of which in their ranks is set down as unexplained.

Four cases of small-pox were reported during the year. Small as this number is, it is just twice as large as that reported in the German army (of a mean aggregate force of over three hundred and twenty-seven thousand officers and enlisted men) for the two years 1879 to 1881. The Surgeon-General properly emphasizes this comparison by calling attention to the greater exposure to the usual sources of infection in the German army than in our own, stationed as the former is in thickly populated communities; and, with equal propriety, he calls for the thorough enforcement of revaccination in our own army.

It is to be hoped that Congress will not long turn a deaf ear to the appeals that have been made for a fire-proof building for the library of the Surgeon-General's office. The pressing necessity for such a provision is again urged, and it is pointedly set forth that great apprehension is felt for the safety of a large number of documents the loss of which would add countless difficulties to the work of the Pension Bureau. As a temporary expedient—only temporary, let us hope—nearly six thousand volumes of hospital registers and death and discharge registers have been placed in truck cases on the ground floor, so arranged that, in case of danger, they can be run out into the street, provided "sufficient warning can be given." By such a slender thread hangs the preservation of data indispensable to the nation's policy of keeping faith with those who have suffered in its behalf! Add to this the loss that would follow the destruction of the invaluable collection of medical books in the library—the force of which loss would fall, as we have heretofore pointed out, not on the army medical corps alone, but on our whole people—and the supineness of Congress seems inscrutable.

EXPERIMENTAL THERAPEUTICS IN LONDON.

AN incident has lately happened in London that a few bigots seem to be doing their best to torture into a pretext for the wholesale arraignment of the medical profession for reckless and inhuman drugging. Dr. Sydney Ringer and Dr. William Murrell, two men to whom the therapeutics of the present day owes some of its most precious resources, recorded in a recent issue of the "Lancet" the results of certain experiments they had been making in the use of nitrite of sodium as a remedy. Among the trials that were made of the drug was its administration to a number of hospital patients.

The beneficial action of several of the nitrites in certain painful and dangerous affections—an action which these two gentlemen have been largely instrumental in establishing—taken in connection with the recent recommendation of the sodium nitrite by an independent observer, certainly appears to have furnished a sufficient warrant for testing the latter agent in a systematic manner. It seems, however, that its action upon the hospital patients in question was quite variable. In some instances it gave rise to sensations so unpleasant that the patients refused to continue its use, even stating their belief

that death would be the result of another subjection to its action.

There is nothing to show that Dr. Ringer and Dr. Murrell failed to observe the precautions proper to be taken in the employment of drugs concerning the effects of which little is known. Indeed, there is positive evidence that such precautions were fully observed. Unfortunately, however, the published report of the trials they had made of it contained an account of the impression its action made on the minds of the patients in question. That was enough for a few agitators who class themselves among the anti-vivisectionists. At once they set up the cry in the newspapers, and through other channels that suited their purpose, that this incident was only an example of the usual unfeeling and reckless way in which physicians were wont to treat poor hospital patients.

Now, if there is one thing against which, more than another, the man of ordinary ignorance rebels, it is the idea of being "experimented on" in a medical way. It is easy to see, therefore, what a lever the agitators found ready at hand. The accusation could easily have been refuted in the minds of the intelligent, even if there were anything to show that they were inclined to entertain it; but, when it comes to the pass that the medical officers of the hospital concerned see fit to meet and formally express their disapproval of such experimental inquiries, as was done in this instance, it may well be feared that the retort will be made, *qui s'excuse s'accuse*. It may have been unwise to allow the report to appear in the precise form given to it, but certainly the profession will sustain Dr. Ringer and Dr. Murrell on the main issue, and, for our part, we can only hope that the annoyance to which they have been subjected will not lead them to abandon the pursuit of experimental therapeutics in disgust.

THE CRUISE OF THE CORWIN.

IN accordance with a resolution passed by the House of Representatives at its last session, requesting copies of documents in the possession of the Treasury Department containing medical and scientific notes and observations made on the cruises of revenue cutters during the year 1881, the department has lately issued a quarto volume, of moderate thickness, giving such notes as were made on the cruise of the steamer Corwin in the Alaskan and northwestern Arctic waters. Valuable observations on the plants and birds of the regions in question are contributed by Mr. John Muir and Mr. E. W. Nelson, and Mr. Tarleton H. Bean adds a list of fishes known to exist in the Arctic Ocean, north of Behring's Strait. But our readers will be more particularly interested by Dr. Irving C. Rosse's medical and anthropological notes on the native inhabitants.

Dr. Rosse furnishes a good deal of evidence that the Esquimaux are by no means an athletic or warlike race. As a general thing, they were found quite inferior to the Corwin's company in muscular development. It seems that, when they are attacked with sickness of any considerable gravity, there is a marked tendency to adynamia, and the resident practitioners find it necessary to employ supporting measures freely, for the

most part the administration of quinine. Dr. Rosse had the opportunity of observing several cases of an endemic disease in which this feature of prostration was prominent. The affection was characterized, he tells us, by pronounced dyspnoea, bronchophony, imperfect aëration of the blood, cough, expectoration, pain, insomnia, and great physical and mental depression. At the outset it often happened that the patient had made up his mind that he must die, and in that condition it was almost impossible to impart the least ray of hope to him. Dr. Rosse regrets that no opportunity was offered for a post-mortem examination, but gives his impression that the morbid anatomy may have been different from that of pneumonia as it is known in temperate climates. He leans to the opinion that, on returning from a sojourn in the Arctic region, the voyager is more disposed to suffer from meteorological changes than he was before leaving home.

There are many points of great interest touched upon by Dr. Rosse, and his style of writing makes the story attractive.

A PREPARATORY SCHOOL OF MEDICINE.

A NOVEL medical school is to be started in London, we learn from the "Medical Times and Gazette," being a preparatory school of medicine and natural science, under the auspices of the West London Hospital. This institution has, of course, the usual facilities for imparting medical instruction, and, as it is conveniently near the South Kensington Museum, the natural sciences can readily be taught in a branch of the school.

The particular objects aimed at in the medical department are stated to be the following: "1. To give, in a more complete and systematic manner than has heretofore ever been attempted, all the advantages of a year's pupilage at a first-class provincial infirmary or county hospital. 2. To give thorough and practical instruction in natural science, such to be carried up to the standard of the preliminary scientific (M. B.) examination of the London University. 3. To give intending medical students an early insight into medical work, so that they may, without needless loss of time or money, be able to judge whether or not they have chosen the right profession."

The instruction in medicine and surgery proper is to be purely elementary, but materia medica, osteology, and the subjects taught in the science school will be gone into with greater detail, the latter including mechanical philosophy, physics, chemistry, botany, zoölogy, and drawing.

The managers of this enterprise are to be credited with some ingenuity when they speak of the South Kensington Museum as "conveniently near" the hospital, although it takes a ten-minutes' journey by the underground railway to get from the one to the other. We wonder their fertility of resources did not suggest to them that it would be a taking piece of policy to term the institution a medical Kindergarten.

MINOR PARAGRAPHS.

THE NEW SURGEON-GENERAL OF THE ARMY.

ON Friday of last week the President appointed Assistant Surgeon-General Robert Murray to be Surgeon-General of the

army, in place of the late Surgeon-General Charles H. Crane. Surgeon-General Murray entered the medical corps of the army in the year 1846, as an assistant surgeon; in 1851 he was made captain; in 1860, major; in 1865, brevet lieutenant-colonel and brevet colonel; and in 1876, colonel. His brevets were earned by faithful and meritorious service during the War of the Rebellion. While Assistant Surgeon-General he served as the Medical Director of the Department of the East, on General Hancock's staff.

Our Washington correspondent, under date of October 13th, mentioned Dr. Murray as one of two the most prominent candidates for the succession to the office of Surgeon-General. It is not to be supposed, however, that Dr. Murray's candidacy was at all obtrusive; he was simply the senior officer in the regular line of promotion. By appointing him the President has followed the principle—a safe one in the majority of instances—of a regular succession, and has avoided the appearance of partisanship that might have attached to the choice of any one of the other candidates in the field. We look to see the affairs of the medical corps of the army well administered by Surgeon-General Murray.

THE LONG ISLAND NUISANCES.

AFTER somewhat prolonged consideration—or, at least, after the lapse of a long time supposed to have been devoted to consideration—of the various sources of the abominable odors that pervade the country around Hunter's Point, the State Board of Health is reported to have adopted a report which includes certain recommendations to the owners of a starch factory. The board advises that none of the waste products be allowed to enter the adjacent creek or any of the neighboring waters, but be led into a vat, there to be subjected to chemical treatment.

It needs no great stretch of one's natural powers of inference to divine that, so far as the starch-makers are concerned, the board's advice lacks the charm of novelty. Perhaps this fact may account for the observation reported to have been made by them: "We shall respectfully consider the recommendations, which, however, are not mandatory. They will not affect us. It would be impossible for us to adopt them." Meantime, an association of the citizens of Sea Cliff undertakes to see to it that the board's report shall become mandatory in case it receives the Governor's approval.

TYPHOID FEVER AND THE ORANGE COUNTY DAIRYMEN.

ONE of the daily papers having published a letter from a medical man living in Goshen, containing pointed allegations of negligence on the part of the dairymen of that town in the disposal of refuse matter, which, the letter asserts, is in many instances allowed to percolate into the well or to mingle with the water that the cows drink, the milk-producers have chosen to make a show of indignation at what they are pleased to regard as a charge of deliberately and maliciously poisoning their commodity. Of course, this is a ridiculous stand for them to take. It is to be hoped that the facts in the case will be made the subject of a searching investigation. The ordinary rustic is apt to pooh-pooh the matter of drainage. He should be made to understand that it is not his opinion we want, but his compliance with the commonest demands of decency and the laws of health.

ASYLUM MISMANAGEMENT.

ACCOUNTS of neglect and brutal treatment of the inmates of asylums for the insane are getting to be unpleasantly common. The latest story of the sort that has come to our knowledge relates to an asylum in Dayton, Ohio. We are constrained to

suppose that the statement is exaggerated, for it seems incredible. The report is that a bath was being administered to a patient, and that the attendant left the man in the bath-tub to go into another room for his clothes. During his absence the hot water was turned on, and when he returned he found the man boiled to such an extent that "the cooked flesh stuck to his fingers"—and yet the man was alive. In view of the length of time usually required for the cooking process, we wonder whether the apartment to which the attendant had to go was also in Dayton, or in an adjoining town. The affair is said to have happened early in the evening, and no physician visited the scalded man until noon the next day.

NEWS ITEMS.

INFECTIOUS DISEASES IN NEW YORK.—We are indebted to the Sanitary Bureau of the Health Department for the following statement of cases and deaths reported during the two weeks ending November 27, 1883:

DISEASES.	Week ending Nov. 20.		Week ending Nov. 27.	
	Cases.	Deaths.	Cases.	Deaths.
Typhus.....	0	0	0	0
Typhoid Fever.....	32	13	33	12
Scarlet Fever.....	44	9	64	7
Cerebro-spinal meningitis....	1	1	2	2
Measles.....	51	6	36	4
Diphtheria.....	39	22	37	16
Small-pox.....	1	0	0	0

THE NEW YORK ACADEMY OF MEDICINE.—At the next meeting, to be held Thursday evening, December 6th, Dr. T. Gaillard Thomas will read a paper on "The Treatment of Puerperal Septicæmia."

THE NEW JERSEY SANITARY ASSOCIATION will hold its ninth annual meeting in the Senate Chamber, at Trenton, on Thursday and Friday, December 6th and 7th. The order of business is as follows: *Thursday—afternoon session, at 3.30 o'clock*: "Methods of Sewage Disposal without Discharge into Streams," by Mr. J. J. R. Croes, of New York (the discussion to be opened by Mr. C. F. Wingate, of New York). "Malaria," by Dr. T. W. Harvey, of Orange (Dr. H. P. Godfrey, of Camden, and Dr. E. M. Hunt, of Trenton, to take part in the discussion). *Evening session, at 7.30 o'clock*: "Methods of Popularizing Sanitary Information," being the annual address by the president, Mr. J. C. Bayles, of East Orange. "Domestic Wells and Cisterns; Best Methods of Construction," by Dr. J. W. Pinkham, of Montclair (the discussion to be opened by Mr. George P. Olcott, of Orange). "Upon the Agencies, both Natural and Artificial, affecting the Purity of the Passaic River, above and below Paterson," by Professor A. R. Leeds, of Hoboken. *Friday—session from 9 A. M. to 1.30 P. M.*: "School Hygiene" (report of a committee, by Professor H. B. Pierce, of New Brunswick; paper, by Professor James Green, of Long Branch; "Physical Exercises in Schools," by Professor J. M. Watson, of Elizabeth). "Appliances for Raising and Distributing Water," by Professor C. F. Brackett, of Princeton. "Filtration," by Professor George H. Cook, of New Brunswick (the discussion to be opened by Mr. Edward Dunn, of Newark). "Nuisances Incidental to Manufactories," by Dr. J. Mortimer Brnsh, of Bergen Point (the discussion to be opened by Mr. William Phillips, of Newark). "Reports from Localities." "General Discussion." Election of Officers.

THE PARIS FACULTY OF MEDICINE.—The assignments of the *agrégés* for the session of 1883-'84 are as follows: Internal pathology, M. Landouzy; external pathology, M. Richelot; physiology, M. Richet; pathological anatomy, M. Raymond; obstetrics, M. Budin; physics, M. Gariel; chemistry, M. Henninger;

natural history, M. Blanchard. It is said that M. Pajot has been nominated to succeed M. Depaul as professor of obstetrics.

THE FRENCH ACADEMY OF SCIENCES.—The vacancy caused in the section in medicine and surgery by the death of Baron Cloquet was filled on the 12th of November by the election of Professor Charcot. There were three candidates: M. Charcot, M. Sappey, and M. Hayem. M. Charcot received forty-six of the fifty-eight votes cast, and M. Sappey received twelve.

TRICHINIASIS AND AMERICAN PORK do not seem to be so intimately connected with each other, from the European point of view, as they have seemed in the past. A committee of the French Chamber of Deputies has had its attention drawn to the fact that the recent outbreak in Saxony was occasioned by German pork, and it is now thought likely that the French decree, prohibiting the importation of pork from America, will soon be revoked.

"THE MEDICAL METROPOLIS OF THE UNITED STATES is now medically alive," says a Philadelphia correspondent of the "Maryland Medical Journal." In the same letter we find it stated that Dr. H. C. Wood's "'Therapeutics' are going to be translated into Italian.

OBITUARY NOTES.

JOHN BELL, M. D., OF CHESTER, N. H., died recently, at the age of fifty-two. He graduated from the Academic Department of Dartmouth College in 1852, and from the Medical Department of the University of Pennsylvania in 1854. In 1861 he was commissioned Assistant Surgeon in the United States Army, from which he resigned June 24, 1867. In 1865 he received the brevet ranks of Captain and of Major for faithful and meritorious service during the war. He had practiced his profession in Kingston, Derry, Dover, and Chester, N. H., and in New York City.

PROFESSOR FRANCESCO CORTESE, formerly the professor of surgery in the University of Padua, and afterward surgeon in the Italian army, with the rank of major-general, died in Rome on the 24th of October, at the age of eighty-one years. The Italian journals speak of him as illustrious in science, an eminent patriot, and an unpretentious philanthropist.

Letters to the Editor.

ANTI-PYRETICS IN TYPHOID FEVER.

BOSTON, 24 MARLBORO STREET, November 26, 1883.

To the Editor of the New York Medical Journal:

SIR: I believe the more one sees of typhoid fever, and the better acquainted one becomes with the literature of the subject, the less is the disposition to dogmatize about it, or to be very ardent about any pet theories in regard to the etiology or treatment of the disease. I have, therefore, no such design upon your valuable space. But I have just read a paper in your last issue, by Professor Beverley Robinson, concerning the use of antipyretic agents in typhoid fever, which seems to have been partially evoked by a report of some cases by Dr. F. W. Draper and myself, in a recent issue of the "Boston Medical and Surgical Journal," thus referred to in a foot-note of Dr. Robinson's paper: "Any one who shall (*sic*) read with an unbiased mind the cases and discussion here reported will scarcely be tempted to repeat the experiments of Drs. Shattuck and Draper."

Now, Mr. Editor, having already granted in the report that the experiments with kairine could very easily be improved

upon, I will not insist upon their being *repeated*, and I merely wish to say that I should regret the publication of the cases if either the cases themselves or Dr. Robinson's reference to them should prevent others from trying kairine. "It is not so devil as it is black"—in fact, I think, with moderate precautions, it will be found an unusually safe thing to administer.

The depressing effects in these cases at the Boston City Hospital were more marked than in the cases of its use reported from Germany which I have seen. I suspect it is possible that may indicate a less pure preparation, a difference of action resulting similar to that shown by salicylic acid from oil of wintergreen, and salicylic acid from carbohic acid.

Although appreciative of the wisdom pervading Sir William Jenner's address before the Midland Medical Society, to which Dr. Robinson alludes, I still do not hesitate, in certain cases of continuous high temperature, to resort to antipyretics circum-spectly, and should be glad to have a better one than we now possess. Kairine should be allowed a fair chance to prove its claims, and I see, by the discussion following Dr. Delafield's paper before the New York Academy of Medicine, that it is in process of having it in New York.

Very respectfully yours,

GEORGE B. SHATTUCK.

THE NEW YORK INFANT ASYLUM.

NEW YORK, November 27, 1883.

To the Editor of the New York Medical Journal:

SIR: The extract from the minutes of the Executive Committee of the New York Infant Asylum, published in your journal of November 24th, by Richard B. Kimball, secretary, concerning the meeting of October 6th, states:

"Dr. Foster submitted the report of the sub-committee, appointed September 29, 1883, Messrs. Foster, Burrall, and Goodridge, which was read by the secretary and ordered placed on file."

We wish to call attention to the fact that *preceding* this action the minutes contained the following:

"Colonel Willis then moved to lay the resolution of September 29th, just reconsidered, on the table, which was seconded. . . . After discussion by Dr. Foster, the motion to lay on the table the resolution of September 29th, appointing a sub-committee of Foster, Burrall, and Goodridge, was laid on the table. Ayes—Bates, Bell, Kimball, Turner, and Willis. Nays—Foster."

Is it not clear from the foregoing that our statement, published in your journal October 27th, concerning the action of the Executive Committee toward the chairman of this sub-committee, is strictly in accordance with facts? When Dr. Foster submitted the communication prepared by the sub-committee, that committee had already been discharged by laying the rescinded original motion on the table, and there was no longer either committee or chairman.

We are requested by Dr. Joel Foster to add that his reported statement to the effect that the measles had recurred "twice, thrice, four, and five times in the same patient," was made upon the authority of the resident physician.

F. A. BURRALL, M. D.,

HENRY D. NICOLL, M. D.

THE PRESIDENCY OF THE NEW YORK MEDICO-LEGAL SOCIETY.

581 FIFTH AVENUE, NEW YORK, November 26, 1883.

To the Editor of the New York Medical Journal:

SIR: Will you kindly permit me, through your valuable journal, to inform my friends that I am not a candidate for the

presidency of the Medico-Legal Society at the coming election. I was placed in nomination while absent from the meeting.

The office of president for the ensuing year belongs, without question, on the medical side of the society, and while I appreciate the distinction it confers—if fairly won—there are others who have been longer in and who have done more for the society than myself, and who have a prior claim to the honor.

I am very truly yours,

M. H. HENRY, M. D.

Proceedings of Societies.

NEW YORK SURGICAL SOCIETY.

A STATED meeting was held November 13, 1883, THOMAS M. MARKOE, M. D., President, in the chair.

DOUBLE DISLOCATION OF THE PATELLA.—Dr. F. LANGE presented a boy, eleven years of age, who illustrated dislocation of both patellæ outward in every attempt to flex the knee joints. It was difficult to determine whether or not the abnormality was congenital, because it was not noticed until quite late. It had been simply observed that the child was not able to walk as well as other children, and that his knees were exceptionally thickened, and became tired easily. Dr. Lange saw the boy about the first of June last, when he was pale and nervous, and sometimes fainted. At present, when he walked, he lifted his pelvis and tried to keep the thighs as vertical as possible, thereby avoiding flexion at the knee joint. The extensor muscles of the thigh were atrophied somewhat. Every time the joints were flexed the patella, which was abnormally small and flat, became completely dislocated, and turned so that its internal edge was directed forward, and the condyles of the femur could easily be marked out. There was a strong inward rotation of the femur during flexion. On the other hand, he could extend the limbs completely, only with difficulty; that is, they were stretched to about a right angle without hindrance, and then he made a peculiar rotary movement with the heel on the table and pushed the entire limb in order to complete the extension. If the patella was kept in position he was unable to flex either joint. The hip joints were normal. He had been wearing an apparatus, but without improvement. A complete cure probably could not be obtained.

LIGATION OF THE COMMON ILIAC ARTERY FOR ANEURYSM OF THE EXTERNAL ILIAC, PERFORMED THROUGH THE PERITONÆUM.—Dr. LANGE also presented a patient with the following history: He was thirty-seven years old, a musician. He admitted having had gonorrhœa, but denied syphilis. He had had "ulcers in the throat" about six years ago, and still presented a hyperostosis of the right tibia probably of a syphilitic nature. In July, 1882, he first noticed pain in his left leg, about the knee, which appeared quite suddenly and caused intense lameness for a time. In this way he suffered till January, 1883, partly in hospitals, partly at home, but never entirely free from an uncomfortable feeling or soreness in the knee joint. It was said to have been swollen, and was treated for some time by an immobilizing dressing. A puncture also was at one time intended, but was omitted on account of spontaneous improvement. The patient said that all through that time he had a lump about as large as a pigeon's egg in the left inguinal region. From January till May, 1883, he felt well, but in May he suddenly fell on account of absolute lameness of the left leg, so that he had to be carried home, where he improved very soon. Such fits without any

pain were repeated about three times within the next months. In July, Dr. Lange saw the patient first. Several weeks previous to that he had been subject to severe suffering. The lump in his left groin, which so far had attained about the size of a hen's egg, had increased rapidly, without apparent cause. Numbness and a feeling of cold had affected the limb, which became weaker and weaker, and a more or less severe pain along the anterior aspect of the thigh persisted. On the 23d of July a pulsating tumor, with all the characteristics of an aneurysm, occupied almost the whole iliac fossa, causing the abdominal wall to protrude above Poupart's ligament. Its upper boundary ran from the anterior superior spinous process toward the umbilicus, ending about an inch below the latter, in the middle line, which formed about its mesial outline. A spindle-shaped process of the tumor extended in the direction of the femoral artery below Poupart's ligament. But nowhere could arterial pulsation be detected in the limb, which was cool and had a bluish hue.

Ligation of the common iliac artery was resolved upon as the only procedure worthy of consideration, in view of the rapid growth of the tumor within the last few weeks; and it was decided to perform the operation through the peritonæum on account of the difficulty which must have offered itself in this case to the customary retro-peritoneal way of reaching the vessel. The patient was prepared by rest, diet, laxatives, and the internal administration of bismuth, and the operation was performed under strict antiseptic precautions, without any serious difficulty, with the able assistance of Dr. McBurney and the house surgeon at Bellevue Hospital, on the 26th of July.

A long incision was made, beginning, as could be seen from the scar, 1.5 inches above the umbilicus, and reaching downward about 6 inches. All the intestines were removed from the upper aperture of the pelvis and wrapped between large flat sponges outside the abdominal cavity. An unusually large speculum served as a good retractor and reflector, so that the second step in the operation, the ligation of the artery, was executed with safety and ease. The ligature was of silk, and was cut short. It could be ascertained that the artery was lifted from its normal bed by the blood-sac, over the mesial aspect of which it could be traced for some distance.

No bad symptoms followed the operation, and the vitality of the limb remained unimpaired excepting a small cutaneous necrosis on the great toe. The temperature was never very high, so far as he remembered, only once above 102° F., at the time when the first movements from the bowels took place, and partly, perhaps, due to a cystitis in consequence of catheterization. The patient was discharged about five weeks after his admission. At that time a slight diminution of the tumor had already taken place, and a faint pulsation in the main arteries could be detected. Dr. Lange did not know whether that was not an error, because he was unable to discover any pulsation at the present time. The temperature of the limb had now become more nearly normal, yet it was somewhat less nourished, and was paler in color than the right one. Its sensibility was normal, but its reflex irritability was diminished as compared with that of the right limb. The pain the patient complained of formerly had ceased, and the tumor had shrunk to the size of a good-sized orange.

COMPOUND COMMINUTED FRACTURE OF THE SKULL; ABSENCE OF BRAIN SYMPTOMS; HEALING BY FIRST INTENTION: RECOVERY.—Dr. CHARLES MCBURNEY presented a child, five years of age, who received a compound comminuted fracture of the skull on the last day of October. He was operated upon, under Dr. McBurney's direction, a few hours after the receipt of the injury, by Dr. Fuller, House Surgeon at Bellevue Hospital. There was marked depression of bone, but there were

no brain symptoms. There was a ragged wound about an inch in length at the seat of the injury, and the operation was begun by extending this wound about an inch in each direction, and a portion of bone about an inch in diameter was removed, made up of many small fragments. The dura mater was not injured. Before and during the operation the parts were irrigated with bichloride-of-mercury solution, the edges of the wound were trimmed, and the aponeurotic layer, together with the periosteum, was brought together by one deep row of sutures and the skin layer by another. No drainage-tubes were used. The wound was dressed with iodoform, prepared cotton, and gauze, and a starch bandage was applied. The dressing was not removed until the eighth day after the operation, when the wound was found in the condition of complete union, as now seen. Not a single unfavorable symptom developed during the progress of the case, and no dressing was required after the first one was removed.

OSTEOSARCOMA OF THE LOWER JAW.—Dr. McBurney also presented a colored boy, thirteen years of age, who had a tumor on the side of his face and neck, which was especially notable on account of its size. The tumor was said to have had a growth of nine years, and to have begun in the lower jaw, from which time, according to the account, it had quite steadily increased in size up to the present date. According to the history, which was exceedingly meager, the tumor was removed about three years ago, but Dr. McBurney had been unable to obtain any of the details of the operation. The growth seemed to involve the lower jaw and possibly the upper jaw, and considerably narrowed the fauces and cavity of the mouth. Its circumference was twenty-five inches, and it measured eighteen inches from side to side. There had been an average growth of two inches during the last six months.

ARTERIO-VEINOS ANEURYSM OF THE COMMON CAROTID ARTERY AND THE INTERNAL JUGULAR VEIN.—Dr. L. A. STIMSON presented a patient, twenty-five years of age, who had a traumatic communication between the common carotid artery and the internal jugular vein, produced by a stab with a penknife in February, 1882. A profuse hæmorrhage occurred at the time of the injury, but it was arrested within two hours, and did not return. At the end of a week the wound was healed. The neck, however, remained swollen, and in the following June, after a spree, a lump appeared in the throat, the face and neck became swollen, there was some difficulty of breathing, and the patient consulted a physician, who called his attention to a peculiar thrill in the neck. The acute symptoms soon subsided, and in the following August the man resumed work, but soon found that it interfered with his comfort, produced a choking sensation, vertigo, etc., and he abandoned it. Since that time he had consulted several physicians, and had been uniformly advised to have nothing done. He came to Bellevue Hospital complaining of gastric distress, a choking sensation, vertigo, dimness of vision in the left eye, and loss of hearing in the left ear. There was considerable exaggeration in his account of all these symptoms. At that time, however, there was a marked thrill over the left side of the neck down to the clavicle, with a loud, double sound. Dr. Stimson finally decided to operate, with the intention at first of placing two ligatures upon the vessel, but finally decided to apply only one, and that upon the proximal side of the common carotid artery, trusting that the recurrent stream from the distal side of the opening would not be sufficiently strong to give rise to any discomfort. The operation was performed on the 8th of October. An incision was made so as to expose the artery above the omohyoid muscle, but the tissues overlying the vessel were found so thickened at this point that the incision was prolonged downward, and the artery tied below the muscle. A drainage-tube was introduced and a dress-

ing applied. The dressing was changed on the fourth day, the drainage-tube was removed, and from that time recovery was rapid. There was no rise of temperature above 100° Fahr., except once, and then only for a few hours, when it sank and remained normal. The thrill, which ceased at the time the ligature was applied, was perceptible at the first dressing, but it was very slight, and it could now be felt, but in very much diminished force as compared with that which was present before the operation was performed.

During the progress of the case after the operation, two accidents occurred. The first was on the tenth day. The man awoke from sleep with præcordial anxiety and distress, and also distress in breathing, and was very much alarmed. He was quieted with a moderate dose of morphine, went to sleep, and suffered no further inconvenience. Dr. Stimson thought that the symptoms were due to disturbance in the pulmonary circulation, consequent on the transmission of a small embolus detached from the clot. Exactly where it came from, however, he was unable to say. Since that time the patient had had no return of a similar attack, but had at intervals had a peculiar distress, which would seem to indicate that probably the explanation given for the first attack was incorrect.

The second accident occurred about the fourteenth day, when he complained in the morning of some loss of power in the right hand, with a moderate amount of dizziness, which disappeared in the course of two or three hours. He had not suffered from any inconvenience of a similar character since. Dr. Stimson thought that, undoubtedly, these symptoms were due to cerebral embolism.

PRIMARY EXCISION OF THE ELBOW JOINT FOR INJURY OF THE ELBOW.—Dr. W. T. BULL presented a patient, forty-eight years of age, who fell three stories from a scaffolding, and received a compound fracture of the ulna, the olecranon being split into several pieces, and a vertical fracture, or fissure, between the condyles of the humerus. He had also a fracture of the ilium on one side. The operation upon the elbow joint was performed twenty four hours after the receipt of the injury. All the articular ends were excised, the entire olecranon, the head of the radius, and the condyles of the humerus, making in all about two inches of bone, the periosteum being sawn as far as possible. The limb was dressed in the right-angled position, and healed, after an attack of cellulitis, in five weeks. Peat and carbolic-acid dressings were used eight months after the operation. The patient had very little power of flexion, but he was able to lift considerable weight with the limb, and the motion of the fingers was satisfactory. He could put his hand to his head. While the result was not all that might be desired, Dr. Bull thought it justified the operation, and that the limb, even in its crippled condition, was a great improvement on an artificial one.

Dr. R. F. WEIR suggested that considerable benefit might attend the use of some lateral support for the limb.

AMPUTATION OF THE ENTIRE PENIS FOR EPITHELIOMA.—Dr. BULL also presented a patient, aged forty-three, who came into the New York Hospital with epitheliomatous ulceration of the penis, for which the entire organ was removed down to the insertion of the corpora cavernosa into the pubic bone, the corpus spongiosum being divided just in front of the bulb. The specimen was presented. It was a curious fact that the patient traced his disease to the cicatrix of a chaneroid which he had had twenty years before. The growth itself appeared first as a wart, and gradually extended, and for ten years he had borne a great deal of pain from the ulceration and suppuration, and his general health had been much impaired before submitting to the operation. At the time the operation was performed the ulceration had extended back to within one inch and a half of the root of the penis, but the extremity of the

glands was intact. There was induration and enlargement of the inguinal glands upon both sides, to the size of a horse-chestnut. In amputating the organ, Dr. Bull followed Demarquay's method. The penis was encircled by two incisions, which started from just above its root, and joined on its lower surface to split the scrotum, and extended as far as the middle of the perinæum. The corpus spongiosum was divided in front of the bulb, and detached from the corpora cavernosa, and the scrotum on either side dissected back. The attachment of the crura to the pubic arch was divided with scissors. The bleeding was not excessive, and was easily controlled with artery-clamps. The urethra was slit up along its roof and floor, and stitched into the edges of the wound at the peno-scrotal junction. A drainage-tube was inserted at the lower angle of the wound, and the edges were sutured with catgut. Peat and bichloride dressing was used. Primary union failed, and the wound healed by granulation in six weeks. A catheter was left in the urethra forty-eight hours. At the end of that time a chill occurred, and it was withdrawn. A bougie or sound was passed every day for a month, but none had been used for two weeks past. When the man was discharged, a No. 30 sound could be introduced without difficulty, and the same number could be used now.

With regard to the enlarged glands in the groin, Dr. Bull had intended to remove them, but, as the operation had already been prolonged and tedious, he decided to postpone their removal until a future date. Since then the induration had almost entirely subsided. The improvement in the patient's general condition had been perfectly satisfactory, and began immediately after the operation was performed. He was now obliged to urinate in the sitting posture. Dr. Bull thought that the wound would have healed more readily had the testicles been removed at the same time amputation of the penis was performed, but the patient declined to part with all his evidence of manhood.

(To be concluded.)

NEW YORK OBSTETRICAL SOCIETY.

A STATED meeting was held June 5, 1883, Dr. C. C. LEE, President, in the chair.

OVARIAN CYSTOMA COMMUNICATING WITH THE RECTUM.—Dr. WILLIAM M. POLK showed a specimen, and related the history of the case. [The case will be published in a future number of the journal.]

Dr. JAMES B. HUNTER thought that ovarian cysts communicating with the rectum must be rare. He had seen one case in which such a communication had been suspected from the clinical history, but the patient was not long under his observation, and the question was not settled.

Dr. JOSEPH E. JANVRIN had seen an instance of the sort, in which the cyst twice discharged its contents through the rectum. No operation was performed, as the patient was suffering with Bright's disease, of which she subsequently died.

Dr. WILLIAM T. LUSK alluded to a case that had come under the observation of the late Dr. Peaslee, in which a large abscess, which had discharged through the rectum, was supposed before the patient's death to be an ovarian tumor.

OVARIAN TUMOR TREATED BY PARTIAL REMOVAL AND DRAINAGE.—Dr. POLK also showed the uterus, broad ligaments, and rectum of a patient whose history was as follows: She was sixty-nine years old, and had had good health until a year and a half before, when a tumor made its appearance in the right iliac region. It increased rapidly in size until by its weight and bulk her health and comfort were seriously affected. When she was admitted into Bellevue Hospital the tumor was found to be ovarian. The uterus was pushed to the left and well down into the pelvis, the fundus resting against the lower margin of the

left obturator foramen, imparting a feel of resistance to the left lateral region of the pelvic floor. The remainder of the floor was occupied by a fluctuating mass—the whole crowded down to the pelvic outlet. It seemed probable that the tumor was without a pedicle.

The operation was done March 1st. The tumor was emptied and turned out without difficulty, there being few adhesions. After cutting away the larger part of the sac, its cavity was found to extend between the folds of the right broad ligament quite to its base, so that the tissue intervening between the cavity of the vagina and that of the sac was barely a third of an inch in thickness—in fact, the bottom of the sac, as the specimen showed, was attached to the upper end of the vagina in Douglas's cul-de-sac, being thence reflected to the anterior wall of the rectum. All this portion was covered with a side-growth of papillomatous tumors, and near the upper edge of the broad ligament were several nodules having a suspicious resemblance to cancerous deposit. In view of these pathological products, enucleation was deemed preferable to any attempt at drainage. This was accomplished throughout the entire extent of the attachment, save a spot about as large as a half-dollar, situated partly on the anterior rectal wall and partly in Douglas's cul-de-sac. This was denuded with scissors, and seared with a cautery. The time consumed, over an hour, had seriously taxed the patient's powers. A drainage-tube was introduced, the end resting in Douglas's pouch, and the wound was closed; but the patient never recovered from the operation—she died of exhaustion on the sixth day.

Owing to the nature of the growths in the sac, it had seemed improper to follow the plan of stitching its walls to the abdominal incision, and treating it by drainage. That would have shortened the operation, but would have robbed the patient of the benefit of the permanent removal of tissue subsequently shown to be cancerous. The one spot at which denudation, but not entire enucleation, was accomplished was situated too deep to be brought up and stitched to the abdominal opening. The use of a drainage-tube was therefore all that was left.

It occurred to Dr. Polk that, in simple sacs, free from carcinomatous deposits, in which the bottom was so close to the vagina, and in which enucleation was difficult, an advantage might be gained by making a counter-opening into the vagina, stitching the walls, as usual, to the abdominal incision, and then passing a tube so as to secure drainage from both ends of the sac. There would be no danger of implicating the peritonæum in such a procedure, as the attachments of the sac above and below would isolate the tube.

TAIT'S OPERATION.—Dr. POLK related two cases, and showed the specimens. In the first case the operation had been done three weeks before, and the patient was doing well. The indications calling for the operation had been well marked—for seven or eight years the patient had suffered from intense ovarian dysmenorrhœa, but her general health was good, so that he had regarded the case as likely to furnish a good test of the value of the operation. He would report the ultimate result at the proper time. The operation had not been found difficult.

The second case proved fatal, and the specimens shown consisted of the ovaries and the uterus. In this case the operation had been found troublesome, owing to excessive thickness of the abdominal wall from the deposit of fat. This condition had also interfered with the proper closure of the wound—the peritoneal surfaces could not be brought into due apposition, and, consequently, the fatty tissue remained to a certain extent in contact with the intestines. An abscess formed and opened into the abdominal cavity, and this was the cause of death.

The PRESIDENT was not inclined to lay so much stress on the union of the peritoneal surfaces as was generally done.

Dr. POLK had formerly regarded it as highly desirable, but he had lately seen it questioned by Dr. Goodell, of Philadelphia.

The PRESIDENT added that views similar to Dr. Goodell's had been published by Mr. Knowsley Thornton, Sir Spencer Wells, and others, but that he could only look upon them as theoretical. For his own part, he would aim at perfect union.

TUMOR OF THE BREAST.—Dr. HUNTER showed a small tumor that he had removed from the breast by enucleation. It was not connected with the gland. Probably it was a lipoma, but it had not yet been examined.

OÖPHORECTOMY.—Dr. HUNTER also showed the ovaries removed in two cases of oöphorectomy. In the first case, on cutting the Fallopian tube, a dark fluid spurted out, as from the umbilical cord when divided between two ligatures. This was carefully sponged out, but septic peritonitis took place and ended fatally. The ovaries showed cystic degeneration.

In the second case there was likewise cystic degeneration. The patient had done well, although at first there was a moderate peritonitis. In the first case he had derived great aid, in searching for a bleeding point, by passing a large Fergusson's speculum through the wound down to the source of the hæmorrhage. Sponging through this instrument, he had been able to see the exact point from which the bleeding proceeded, and apply a Paquelin's cautery to it.

Dr. LUSK asked if patients had not been known to be restored to health, after suffering with the symptoms for which Battey's operation was now done, by other than operative treatment. He referred to times preceding the introduction of the operation.

Dr. WILLIAM M. CHAMBERLAIN remembered an instance in which restoration to health followed treatment in a lunatic asylum, where the opium habit was overcome.

Dr. BENJAMIN F. DAWSON could not see how medicinal treatment could prove curative in cases where the ovaries were bound down by adhesions.

Dr. LUSK called attention to the fact that, of the five cases reported at this meeting, three had proved fatal. He thought the inference was, that all possible measures should be exhausted before resorting to the operation.

Dr. HUNTER and Dr. PAUL F. MUNDÉ would emphasize the distinction that ought to be drawn between organic disease of the ovary, on the one hand, and its functional derangement or its crippling by surrounding deposit, on the other hand.

OVARIOTOMY.—Dr. JANVRIN showed two small ovarian cysts that had been removed, five days before, by Dr. Hart, of Plainfield, N. J., at the Muhlenberg Hospital in Plainfield. They were polycysts without adhesions. The patient was doing well.

FIBROUS POLYPUS SIMULATING INVERSION OF THE UTERUS.—Dr. MUNDÉ showed a polypus that he had removed in a case in which difficulty had been met with in the diagnosis, owing to the tumor having contracted adhesions to the cervical canal on all sides. It was only when the patient was anæsthetized and actually on the operating-table that he had been able to feel the body of the uterus, which was very small.

PREGNANCY WITH FIBROUS TUMORS OF THE UTERUS.—The PRESIDENT showed an unruptured four months' ovum that had been expelled spontaneously from a uterus in which the existence of two fibrous tumors had been diagnosed. Their presence had made the condition of pregnancy difficult to determine.

Dr. LUSK was accustomed in such cases to rely a good deal on the mammary signs, and he attached considerable importance to the peculiar bluish tint of the vagina.

ADENOMA OF THE RECTUM.—Dr. POLK showed a patient from whose rectum he had enucleated an adenoma as large as a man-

darin orange, using the finger and the handle of a scalpel, after having performed proctotomy by Volkmann's method. The patient had suffered for several years with pain and a bloody discharge, and had been growing worse. The tumor was situated just within the external sphincter. [A full account of the case will be given in a succeeding number of the journal.]

HENRY J. GARRIGUES, M. D.,

BENJAMIN F. DAWSON, M. D.,

FRANK P. FOSTER, M. D., *ex officio*,
Committee on Publication.

A STATED meeting was held October 2, 1883, Dr. C. C. LEE, President, in the chair.

ARREST OF FETAL DEVELOPMENT.—The PRESIDENT presented a fœtus, supposed to have been born at full term, in which there seemed to be absence of the thighs and of the neck; at the situation of the cerebellum there was a large, soft mass covered by integument; the entire figure resembled that of a dumpling. He had not received permission to dissect the specimen. The mother was an unmarried woman, thirty-two years of age, well-formed and healthy. During labor she professed simply to be suffering from cholera morbus, and decidedly resented a vaginal examination. A foot was seized, turning was effected, and delivery completed without further difficulty.

Dr. B. F. DAWSON thought that there was often a scarcity of liquor amnii found at the birth of such monsters, and was a factor in their development, and asked if such was the case in this instance.

The PRESIDENT replied that no liquor amnii was observed.

Dr. H. F. WALKER mentioned the case of a woman, confined last spring, giving birth to a child imperfectly developed. Delivery took place about a fortnight sooner than she had expected. Dr. Walker diagnosed a breech presentation, and felt what he supposed to be the scrotum, but which proved to be a spina bifida of about the size of an English walnut. The feet were clubbed, the legs short, the thighs flexed upon the abdomen, and capable of being straightened to a right angle only. Afterward hydrocephalus developed, and at present the head was of double the normal size; the spina bifida had increased to the size of a Mandarin orange. The mother's health had been good; that of the father only fair.

Dr. H. T. HANKS said, with reference to the difficulty of making out the presentation, that he once mistook an encephalocele for the breech and scrotum. The error was ascertained by noticing the reflex contractions of the child's lower limbs when the hand pressed the base of the tumor.

The PRESIDENT referred to a case once reported to the society by Dr. Gillette, in which long delay in delivery was finally discovered to be due to a hydrocephalic tumor, which was then punctured, allowing of delivery. The child died a few hours after birth, apparently from exhaustion rather than from shock. In reply to a question by Dr. Walker with regard to the chance of life in children born with spina bifida, the President said that but two cases had come directly under his care. In one an operation was done by Dr. Sands, and the child died from the shock of the operation. The other child was still living, in good health, the tumor being supported, and was now six or seven years of age. There was no other deformity. He was disinclined to resort to other than palliative treatment in cases of spina bifida.

Dr. DAWSON asked Dr. Walker what the color of the membrane covering the tumor was in his case, and stated that some years ago a child was presented at the children's clinic, at the College of Physicians and Surgeons, with a small tumor in the lumbar region. Dr. Jacobi pronounced it a lipoma, and advised its removal. Dr. Dawson cut into the tumor, and was sur-

prised to find that he had opened into a spina bifida. The child died within thirty-six hours. There was considerable fatty tissue over the sac, which was the cause of the error.

Dr. J. B. HUNTER asked the President if, in the case of the monster presented, the arrest of development might not have been due to the effect of ergot or other means which the mother had probably taken to produce abortion.

The PRESIDENT replied that a very interesting and suggestive question had been raised, but he did not think it would be practicable to answer it with our present knowledge of foetal pathology and the effect which maternal impressions produced upon foetal development.

OVARIOTOMY IN OLD AGE.—Dr. J. E. JANVRIN presented a monocyot removed in June last from a woman seventy-seven years of age. Except for the influence of the rapid growth of the tumor, the patient was in good health. The operation was very simple, there being no adhesions, and the tumor being removed through an incision only two inches long. She made an excellent recovery. He believed this to be the oldest patient upon whom successful ovariectomy had been performed in this country, and perhaps in the world. During the same month he operated upon two other patients, in one performing double ovariectomy, and in both recovery went on rapidly. These three patients were operated on in the extremely hot weather of that month, and yet, in spite of the enervating effect of the heat, the recovery was very quick with all of them.

Dr. P. F. MUNDÉ thought the operation had before been performed successfully upon patients seventy-seven years of age, in this country and in Europe. He thought that in the case of old people the question would arise whether it were not better to resort to the temporary benefit from tapping rather than subject them to the risks of ovariectomy.

Dr. HUNTER had a case at present in which he had advised the patient, seventy years of age, against ovariectomy, tapping having already given relief several times.

PUERPERAL CONVULSIONS.—Dr. W. M. CHAMBERLAIN had recently been called in consultation, and received from the attending physician the following history: A young woman, well developed, but of the dark type, of strumous habit and often ailing, was now in the eighth month of her first pregnancy. During the earlier months she had suffered to an unusual degree from neurotic and digestive troubles. For the last two months she had been in the country, and had been much better. She had returned to town the day previous, entertained company at dinner, and retired at 11, with a very bad headache. At 3 in the morning she had got up to pass water, and while doing so had been seized with a convulsion, in which she fell to the floor, bruising her face and cutting her lip badly. Convulsions had recurred several times in the day, and when Dr. Chamberlain saw her, at 3 P. M., she was profoundly comatose. The face was swollen from bruises and livid with venous congestion. The urine, on boiling, was nearly all solid coagulum. The vagina and cervix, exposed by Sims's speculum, were even more livid than the face. The uterine neck was still columnar, and the os closed. Dilatation was begun at once with hard-rubber dilators, followed by Barnes's bags. In the first hour there were three convulsions. After the os was opened to the size of a dollar they ceased, and did not recur. Twelve hours after beginning dilatation, and twenty-four after the first convulsion, delivery was accomplished with the forceps. The uterine pains had been of the feeblest kind, and manual expression had been continuously employed. The loss of blood was very moderate. The child, whose heart-beat had been unrecognized for an hour previous, was asphyxiated. Its restoration was for a time much in doubt, but was finally accomplished. The mother remained unconscious. Dr. Chamberlain advised purgation by croton-oil,

a hypodermic injection of one sixth of a grain of pilocarpine, and chloroform inhalation in case the convulsions should return. The condition of the patient seemed so very unpromising that the attending physician did not execute these suggestions. He, in fact, did nothing, and six hours later reported the patient as still comatose, as having had two convulsions, and as apparently moribund, with a temperature of 106° and a pulse of 160. But from this point she began to improve. Consciousness slowly returned, and six hours later the temperature had fallen to 101°. The second day albumin disappeared from the urine, and now, after five weeks, she was quite well and nursing her baby. The case is particularly interesting as showing how Nature sometimes relieved the uramic patient. Undoubtedly a full venesection was indicated in this case, but, although considered, it was not done.

Dr. MUNDÉ mentioned a case in which he had employed *accouchement forcé*, using the fingers and hand in dilatation instead of instrumental dilators. The patient was the mother of several children, and was eight months advanced in pregnancy. Convulsions began in the night, and when her physician arrived, at 10 A. M., he found her comatose, in which condition she remained until Dr. Mundé saw her in the evening and effected delivery. One convulsion occurred while dilating the cervix. This procedure required about fifteen minutes. The patient was then breathing stertorously, the temperature was 102.5° F., the pulse 140, and she was considered moribund. Death took place half an hour after delivery. The child was born apparently dead, but was easily resuscitated, and lived a month.

Dr. E. L. PARTRIDGE had seen a good many cases of puerperal eclampsia, and had sought for a reliable sign upon which to base a favorable or an unfavorable prognosis. The number or rapidity of the convulsions did not constitute an indication. He had found that, when a rapid rise of temperature took place, a degree or two within one or two hours, until 104° F., or more, was reached, the patient usually died. While delivery should undoubtedly be produced after the occurrence of puerperal convulsions, he did not think that we could foresee their development with sufficient certainty to justify us in anticipating them by the induction of labor.

DISAPPEARANCE OF UTERINE FIBROIDS DURING PREGNANCY.—Dr. HANKS stated that at a former meeting of the society he had related the history of a case of successful delivery in a patient carrying a fibroid tumor in the cervix uteri. She afterward became pregnant, and he, Dr. Lee, and others diagnosed a fibroid in the cervix, and also in the posterior wall of the body of the uterus, and advised the induction of labor at the eighth month. The patient entered the Nursery and Child's Hospital, and Dr. Partridge and the house physician were unable, both before and after delivery, to discover any signs whatever of a tumor of the uterus. It would seem, therefore, that the tumors must have undergone retrograde metamorphosis or absorption during the course of pregnancy.

Dr. PARTRIDGE said that several very careful examinations were made in the case, and no signs of a tumor could be found.

The PRESIDENT said that an amusing case of this kind occurred some years ago when he was associated with the late Dr. Elliot. A wealthy lady of Brooklyn became pregnant, and consulted Dr. Elliot, Dr. Emmet, and some other eminent New York physicians, with regard to her condition. They agreed that there existed a large fibroid tumor of the uterus. As pregnancy advanced, the patient felt less trouble from her condition, but placed herself under the care of Dr. Budd when the time for confinement approached. At that time Dr. Budd was unable to discover any tumor, and, at the request of the lady, wrote a certificate to that effect. The lady made this the basis of a

snit against the physicians, to some of whom she had previously paid large consultation fees.

Dr. HUNTER had seen a case in which a fibroid tumor of the uterus, of the size of a Mandarin orange, disappeared during pregnancy, but reappeared after involution.

DEATH FROM PUERPERAL ECLAMPSIA.—Dr. DAWSON related the history of a case as follows:

M. A., primipara, aged twenty-two, finished her last menstruation January 17, 1883. Until within two hours preceeding the first convulsion she complained of no unpleasant symptom except an occasional pain in the cardiac region, with slight palpitation.

On September 25th she ate a hearty dinner and retired in her usual good health, but was awakened about 1.30 A. M., September 26th, by severe pain in the abdomen, and, thinking that she was to be confined prematurely, she started at once for the New York Foundling Asylum. She had no sooner got into bed than she was seized with a convulsion. This was at 3 o'clock A. M. Dr. Blodget, who was immediately summoned, reached her bedside at 3.15, when the second convulsion occurred. He administered one fourth of a grain of morphine and drew off two ounces of urine, which was all the bladder contained. The urine had a specific gravity of 1.029, and, on boiling, was found to be nearly solid with albumin.

Dr. O'Dwyer arrived at 3.45 A. M., and at 4 o'clock another quarter grain of morphine was administered, and the patient was placed in a hot wet pack, where she was kept for five hours, during which time, as well as nearly all the remainder of her life, she was kept under the influence of chloroform. Wet cups were also applied over her kidneys.

At 6 A. M. one ounce of infusion of digitalis and one drachm of acetate of potash were given by the rectum, and three drops of croton-oil by the mouth, but no movement of the bowels was effected.

In spite of the chloroform and morphine, the patient had eight convulsions between 3 o'clock and 9.15 A. M., being constantly in an unconscious condition. At 9 A. M. the pack was removed, four ounces of urine, of the same character as before, were drawn, a third quarter grain of morphine was given, and attempts were made to induce labor.

A vaginal examination, made when the patient was first seen, gave no evidence of commencing labor. The cervix was long and conical, and the external os was firmly closed. By 10 A. M. dilatation had been made with the finger sufficiently to permit of the introduction of a Barnes's dilator. During the remainder of the day half a grain of morphine was administered, making in all one grain and a quarter; also four ounces of brandy, four ounces of the infusion of digitalis, three drachms of the acetate of potash, and several ounces of beef extract by the rectum were given.

The inhalation of chloroform and the attempts to dilate the cervical canal by means of the Barnes's dilator were continued until about 4 P. M., September 26th. At that time, the dilators having proved ineffectual, although they were so thoroughly distended that one of them burst, and the convulsions still continuing (twelve had thus far occurred), the cervix was incised and stretched and torn with the fingers until the forceps could be applied, and, at 5 P. M., a dead child was extracted by Dr. O'Dwyer. The placenta and membranes were removed intact about ten minutes later; the uterus contracted well, and hæmorrhage was very slight.

At this time the patient's general condition was still fair, the pulse was 128 and tolerably strong, the temperature was 103° F., and the respirations 29.

The convulsions, however, recurred with nearly the same frequency as before delivery, in spite of the continued administration of chloroform, and from 9 A. M. until death she passed only two ounces of urine. Between the time of delivery, which occurred at 5 A. M., September 26th, and death, which took place at 2.45 A. M., September 27th, there were five convulsions, making, in all, nineteen in the twenty-four hours.

The hot wet pack was reapplied at 7 P. M., September 26th, and the patient perspired profusely for several hours, but to no purpose.

A microscopical examination of the urine, made by Dr. Northrop, showed hyaline, granular, and epithelial casts (most of them large), and free granular epithelium. There was no blood nor fat, nor fatty casts.

Dr. DAWSON asked the question whether in such cases, when it was evident that the patient must otherwise die, it might not prove of benefit to withdraw the poisoned blood by venesection, replacing it at the same time by transfusion of fresh blood.

Dr. MUNDÉ said the suggestion had been made before, but he was not aware that it had ever been acted upon. It was to be remembered that transfusion was always attended by symptoms of shock, more or less severe, and, considering the condition of the patient in these cases, the procedure would be very hazardous. Nevertheless, as, on theoretical grounds, it would seem to offer a possibility of rescuing the patient from death, he thought that he would resort to it on the next favorable opportunity.

Dr. CHAMBERLAIN had performed venesection without transfusion, apparently without effect.

The PRESIDENT thought that patients with puerperal convulsions were too liable to be over-treated. In his opinion, the induction of labor and narcotization during convulsions by hypodermic injections of morphine constituted all the treatment that was called for.

Dr. CHAMBERLAIN called attention to the interesting fact that, in his own case, and in most cases, when the patient lay in the comatose state, the irritation produced by dilatation of the cervix caused convulsions, and that after dilatation was complete the convulsions usually ceased. The nausea of pregnancy and that produced by the presence of fibroids, etc., were known sometimes to disappear after dilatation of the cervix.

In the further discussion upon Dr. Dawson's case the impression prevailed that venesection and transfusion would prove of doubtful benefit.

HENRY J. GARRIGUES, M. D.,

BENJAMIN F. DAWSON, M. D.,

FRANK P. FOSTER, M. D., *ex-officio*,
Committee on Publication.

NEW YORK MEDICAL AND SURGICAL SOCIETY.

A STATED meeting was held October 27, 1883, Dr. H. B. SANDS Chairman for the evening.

A PROBE FOR THE EXAMINATION OF FISTULÆ.—Dr. A. C. POST presented a silver probe with an ivory handle, which he had found superior to the ordinary plain probe used in the examination of fistulæ in ano, inasmuch as it did not turn in the fingers. In this connection Dr. Post also remarked that he frequently received patients of whom it had been said by their physicians that they had incomplete external fistula, but he had rarely failed, after careful search, to find the internal opening, which was usually situated just above the internal sphincter. The mistake was very commonly made of searching too high up for the internal opening. Doubtless most fistulæ began at the mucous membrane from within, and gradually burrowed until they made an opening without. The probe could also be bent into a hook and used for the extraction of foreign bodies from the nasal and aural passages.

URETHRAL FISTULA.—Dr. POST said that a patient recently presented himself at his clinic with an abscess on the lower side of the penis, near the meatus, which was found, on incision, to communicate with the urethra; it had been preceded by gonorrhœa. He asked the chairman whether, in his opinion, it was better to repair the edges of the fistula and close it by suture, or if the opening would close by withdrawing the urine regularly with a catheter, so as not to allow it to come in contact with the edges of the fistula.

The CHAIRMAN replied that he had not had experience with urethral fistulæ so near the meatus; he had effected a cure of those near the peno-scrotal junction by performing a plastic operation.

WANDERING TESTICLE.—Dr. B. W. MCCREADY had been called to see a child, between two and three years of age, suffering from colicky pains and erections. The child had been seen by a physician, who had administered a good deal of medicine, but without giving relief. On stripping the patient, who was crying with pain and having erections, a little tumor was seen in the inguinal canal, which was recognized to be a testicle. On pushing it down into the scrotum the pains ceased, but recurred, with erections, when the testicle was again drawn into the inguinal canal. Dr. McCready gave the child about two grains and a half of bromide of sodium four times a day, and the following day the pains and erections entirely ceased.

GASTRO-ENTERITIS.—Dr. FRANCIS DELAFIELD related the following case: In the latter part of September he was asked to see a German physician, who, it was said, was seriously ill. He found a man, apparently between forty-five and fifty years of age, in bed, unable to give any account of himself except to complain of a most severe headache. The skin was cold and clammy, the pulse very rapid and feeble, the face drawn and sunken and of a dusky color, the parts about the eyes were sunken, and the whole appearance of the man was that of a person almost in collapse. His wife said that he had been sick a week, that the attack commenced with vomiting, purging, and febrile movement. The fever lasted for twenty-four hours and then ceased; vomiting and purging had continued the entire week, the matter passed and ejected being of a watery character and in large quantity. One or two of the patient's friends had seen him, but he had refused all medical treatment. His wife was positive that during the last four days before Dr. Delafield saw the man he had passed no urine at all; the nurse confirmed this statement. The bladder, however, seemed contracted rather than dilated. The patient absolutely refused to take medicine. Fomentations to the lumbar region were advised, and thoroughly applied during the night, and the next morning eight ounces of urine were passed. The urine was high-colored and of high specific gravity, but contained no albumin and no casts. On that day the purging ceased, also the vomiting, except when food was taken. The following day he again passed ten ounces of urine, and began to feel better in every respect; the headache ceased, the pulse became slower and fuller, the expression of the face changed, he became rational, continued to pass his urine, and at the end of a week was fairly convalescent. The case seemed to be of interest in two respects: in the first place, with regard to suppression of urine for so long a period in what appeared to be simply a case of rather severe gastro-enteritis; and, in the second place, with regard to so severe a case of cholera morbus occurring at a time when it was known that an epidemic of true cholera had already begun in Asia. It was known that, when epidemics of cholera began in one country, the disease gradually spread until it had invaded many countries, and that its advent was apt to be preceded by unusually severe cases of what was apparently ordinary cholera morbus or gastro-enteritis.

LITHOLAPAXY.—The CHAIRMAN reported that, nine days ago, he had performed Bigelow's operation upon a gentleman sixty-six years of age, and removed a soft, phosphatic calculus, one inch and a quarter in diameter. The patient had been treated twelve years previously by the late Dr. J. L. Thébaud, who removed, by lateral lithotomy, a uric-acid calculus, weighing upward of four ounces, and measuring, in its several diameters, three inches and a quarter, two inches and five eighths, and one inch and a half. During this operation the rectum was wounded, and ever since the patient had suffered from a recto-urethral fistula large enough to admit the tip of the index-finger, which could readily be passed from the rectum into the membranous division of the urethra. This fistula had not seriously

affected the patient's health, but had caused considerable annoyance. The urine voided through the penis was often more or less feculent, and much of the urine passed into the rectum, so that the patient was compelled to assume the sitting posture during micturition, as usually this act was simultaneous with that of defecation. Another singular symptom resulted apparently from the fistulous communication; namely, the habitual passage of soft feces, in the form of narrow cylinders, having a diameter varying from a quarter to half an inch. This symptom had been thought to denote a stricture of the intestine; but no other evidence could be obtained to corroborate such a view, and a digital exploration of the rectum had a negative result. On introducing the finger into the rectum, however, the sphincter muscle was discovered to be unusually strong and active; and it seemed probable that the small diameter of the feces when voided was due partly to a reduction in their consistency from admixture with the urine, and partly to their passage through a highly contractile orifice. The absence of stricture was further indicated by the fact that the symptom described had existed from the time when recovery took place after lithotomy.

The operation of litholapaxy presented only one peculiarity. To prevent the lithotrite, while introducing the instrument, from entering the rectum, it was found necessary to guide its point by means of the forefinger passed into the rectum and through the fistula. No unfavorable symptoms had followed the operation, and the patient was already convalescent.

Dr. W. M. POLK alluded to the fact that in certain cases long, cylinder-like feces were passed in the absence of stricture, the cause being said to be a kind of spasm of the sphincter ani.

Dr. POST asked if the edges of the fistula could not have been repaired and closed with sutures.

The CHAIRMAN replied that the patient's age and condition would hardly justify the operation.

AMERICAN PUBLIC HEALTH ASSOCIATION.

THE eleventh annual meeting was held in Detroit, November 13, 14, and 15, 1883.

First Day.

The meeting was called to order by the President, Dr. EZRA M. HUNT, of New Jersey, at 10 A. M. After prayer by the Rt. Rev. Bishop Harris, and various announcements by the chairman of the local Committee of Arrangements, Dr. William Brodie, the treasurer, read his annual report. The total receipts during the year were \$4,257.23, and the disbursements \$2,928.93, leaving a balance of \$1,328.30 in the treasury.

The first paper was by Dr. D. E. SALMON, of the Agricultural Department, Washington, on THE TEXAS CATTLE FEVER. The paper was a very elaborate one, and sketched the history, ætiology, and symptoms of the disease very fully. The author controverted the opinion expressed in papers previously read by Dr. Joseph R. Smith, of the army, before the association, that no specific disease existed which could properly be termed "Texas Cattle Fever." Dr. Salmon held the view that the disease described under this name was a distinct, specific disease, contagious in its nature, and very fatal. He advocated laws to prevent the spread of the disease. The paper was briefly discussed by Dr. J. H. RAUCH, of Illinois, and Dr. HILARY RYAN, of Texas.

Dr. J. M. PARTRIDGE read a paper on SWINE PLAGUE, an infectious disease attacking hogs. It was estimated that the annual loss to the country from the disease amounted to \$15,000,000. He referred to the investigations of Dr. Detmers, who had discovered a bacillus in the tissues and fluids of the affected animals. This organism was believed to be the cause of the dis-

ease. It might be introduced in the food or drink, or inoculated upon abraded or wounded surfaces. Carbolic acid, in the dose of ten drops to each one hundred pounds of weight of the animal, was believed to prevent the disease. It should be given three times a day. The sick animals should be promptly isolated or killed, and the infected localities disinfected. The healthy animals should be separated into small herds.

A paper by Dr. W. T. BELFIELD, of Chicago, on ACTINOMYCOSIS, which had recently been observed among the cattle at the stock-yards in that city, was read and discussed by Professor JAMES LAW, of Ithaca, N. Y.

Dr. GEORGE M. STERNBERG, of the army, read an elaborate paper on THE ETIOLOGY OF MALARIAL DISEASE. The paper was accompanied by statistical tables, compiled from the records of the Surgeon-General's Office, showing the prevalence of malarial diseases at various military posts in the United States. No very definite conclusions were reached, except that heat, moisture, and vegetable decomposition were necessary for the production of the specific cause of malarial fever.

A paper upon THE ETIOLOGICAL ASSOCIATION OF ORGANIC MATTER WITH MALARIA, by Dr. A. A. WOODHULL, of the army, was read by Medical Director A. L. Gihon, of the navy. It was an exhaustive presentment of the various theories of the causation of malaria, without offering any new views. The New Lenox trial of last year was extensively referred to, and the evidence for the defense mildly criticised.

Dr. CHARLES SMART, of the army, read a paper on the same subject, in which the aetiological importance of polluted water was strongly supported. Dr. Smart cited numerous instances from literature, and referred to observations and experiments of his own, which seemed to show that the importance of water infected with the malarial poison as a cause of the disease deserved more attention than it had hitherto received.

At the evening session, addresses were made by Governor BEGOLE, of Michigan, Dr. WILLIAM BRODIE, of Detroit, and Dr. JOHN AVERY, President of the State Board of Health. The president of the association, Dr. HUNT, then delivered THE ANNUAL ADDRESS, which recounted in happy phrases and eloquent periods the history of the association, the advancement of sanitary science, and the bright promises of the future. The address occupied over an hour in its delivery, and was warmly applauded by the large audience present.

Second Day.

The following papers were read: ON CHANGES IN TYPES OF MALARIAL FEVER IN SUMTER COUNTY, ALA., FROM 1833 TO 1883, by Dr. R. D. WEBB, of Livingstone, Ala.; INTERROGATORIES UPON MALARIAL FEVER, by Dr. J. W. PENN, of Humboldt, Tenn.; and THE CLINICAL THERMOMETER IN THE PREVENTION OF MALARIAL DISEASE, by Dr. T. F. WOOD, of Wilmington, N. C. They were briefly discussed by Colonel G. E. WARING, JR., Dr. A. M. BELL, Dr. G. DEVRON, Dr. O. W. WIGHT, Dr. G. E. RANNEY, Dr. OLDRIGHT, Dr. TRESCOTT, Dr. G. H. ROHÉ, Dr. F. FORMENTO, Dr. E. L. GRIFFIN, Dr. V. C. VAUGHAN, Dr. P. H. BRYCE, and Dr. STERNBERG. The relations of the ground-air and the movements of the ground-water to the production of malarial diseases was more particularly pointed out by Dr. Rohé, Colonel Waring, Dr. Wight, and Dr. Bryce.

Dr. W. K. NEWTON, of Paterson, N. J., read a long paper on THE SANITARY CONTROL OF THE FOOD SUPPLY, which was followed by a paper on the same subject by Professor A. R. LEEDS, of New Jersey, read by Professor Kedzie, of Michigan. The subject was further discussed by Dr. VAUGHAN and Dr. WILSON. More and better laws, stricter enforcement of the same, and the education of a larger number of men and women capable of making analyses of food, were recommended as the most prom-

ising remedies to restrict the adulteration of the supply of food.

Dr. A. L. GIHON, of the navy, read a paper on VITAL STATISTICS AS SANITARY MONITORS. Dr. Gihon advocated a more rational system of vital statistics than that usually carried out in this country. The relation of the number of sick to the population, the duration of sickness, and the relation of deaths to the sick, were the elements of real value in a report of vital statistics. The mere tabulation of births, marriages, and deaths was of very little assistance, even with the aid of the refinements of the higher mathematics, in arriving at reliable conclusions.

Dr. R. B. S. HARGIS, of Pensacola, Fla., sent a paper on YELLOW FEVER AT PENSACOLA IN 1882, of which an abstract was read by Dr. Devron.

Dr. C. J. LUNDY, of Detroit, read an admirable paper on SCHOOL HYGIENE. He referred to the tendency to burden the pupil with too many studies, long hours of study, over-heating, bad lighting, and imperfect ventilation of school-houses, unsuitable desks and seats, and the neglect of bodily training. He dwelt upon the great increase in nearsightedness, and urged greater attention to the sanitary necessities of school-children. The paper was discussed by Dr. A. N. BELL, Dr. E. J. JONES, Dr. J. F. NOYES, and Dr. L. D. WILSON.

At the evening session, addresses were made upon THE IMPORTANCE OF PHYSICAL TRAINING, by Professor J. MADISON WATSON, of Elizabeth, N. J., and Professor D. A. SARGENT, of Cambridge, Mass., and upon THE EMINENT DOMAIN OF SANITARY SCIENCE AND THE USEFULNESS OF STATE BOARDS OF HEALTH IN GUARDING THE PUBLIC WELFARE, by Dr. JAMES E. REEVES, Secretary of the State Board of Health of West Virginia. Dr. Reeves's address was well received, and elicited much favorable comment. [It was published in full in our issue of November 17th.]

Third Day.

The ADVISORY COUNCIL presented a resolution requesting Congress to re-enact the law of June 2, 1879, to prevent the introduction of contagious diseases into the United States. Also a resolution asking Congress to appropriate a suitable sum annually to be expended under the direction of the National Board of Health in making experimental researches in sanitary science. Also, a resolution commending the services of Surgeon-General Wales in the establishment of the National Museum of Hygiene. Also, a resolution recommending a fire-proof building for the Surgeon-General's library, and asking that Congress make a suitable annual appropriation for keeping these valuable institutions in their present efficient condition, and deprecating their separation. The resolutions were adopted.

THE REPORT OF THE COMMITTEE ON COMPULSORY VACCINATION was read by Dr. S. W. ABBOTT, of Wakefield, Mass. It was recommended that vaccination be made compulsory.

THE REMOVAL OF DECOMPOSABLE MATERIALS FROM HOUSEHOLDS was considered in an elaborate paper by Mr. R. HERING, C. E., of New York, which was read by Professor Kedzie. Dr. OLDRIGHT, of Canada, read an exceedingly practical paper on THE OVERHEAD VENTILATION OF SEWERS. THE SANITARY CARE OF HOUSEHOLDS was the title of a paper by Dr. J. H. RAYMOND, of Brooklyn, read by Dr. A. N. BELL. These papers were discussed by Colonel WARING, Dr. BELL, Dr. OLDRIGHT, Colonel D. P. HADDEN, of Memphis, Dr. WRIGHT, Dr. BRODIE, Dr. SHEEHAN, Dr. GIHON, and Dr. AZEL AMES. Colonel Hadden stated that the Waring system of sewerage as introduced in the city of Memphis was a complete success, and demanded the attention of all sanitary authorities.

Abstracts of papers on TYPHUS FEVER IN NEW YORK, by Dr. E. H. JAMES, "BALTIMORE CATARRH," by Dr. JOHN MORRIS, and PULLMAN FROM A SANITARY POINT OF VIEW, by Dr. O. C. DE

WOLF, were read by Dr. C. W. Chamberlain, Dr. Rohé, and Mr. J. K. Allen, of Chicago. Dr. J. N. McCORMACK made a few practical remarks on THE RESTRICTION OF SMALL-POX, after which a number of papers were read by title and ordered printed in the "Transactions" of the association.

At the evening session, the Rt. Rev. HUGH MILLER THOMPSON, Bishop of Mississippi, delivered an eloquent address on SANE HUMANITY, after which Dr. FOSTER PRATT, of Michigan, read a statistical paper on THE INCREASE OF INSANITY IN THE UNITED STATES. Dr. Pratt's paper was very elaborate, and elicited a lively discussion, resulting in the adoption of a resolution requesting Congress to enact laws to prevent the introduction of paupers, criminals, and insane persons from foreign countries.

After a vote of thanks to the local Committee of Arrangements, and others who had contributed to make the meetings so pleasant and successful, the association adjourned, to meet in St. Louis on the third Tuesday in October, 1884.

The following-named gentlemen were elected officers for the ensuing year:

President, Dr. A. L. GIBON, of the navy; First Vice-President, Dr. JAMES E. REEVES, of West Virginia; Second Vice-President, the Hon. ERASTUS BROOKS, of New York; Secretary, Dr. IRVING A. WATSON, of New Hampshire; Treasurer, Dr. J. BERRIEN LINDSLEY, of Tennessee; Executive Committee, Dr. T. L. NEAL, of Ohio, Dr. J. D. GATCH, of Indiana, Dr. H. P. WALCOTT, of Massachusetts, Dr. G. DEVRON, of Louisiana, Dr. CHARLES SMART, of the army, Dr. D. FRASER, of South Carolina.

Reports on the Progress of Medicine.

OTOLOGY.

By CHARLES STEDMAN BULL, M.D.,

LECTURER ON OPHTHALMOLOGY AND OTOLOGY IN THE BELLEVUE HOSPITAL MEDICAL COLLEGE; SURGEON TO THE NEW YORK EYE AND EAR INFIRMARY; OPHTHALMIC SURGEON TO ST. MARY'S FREE HOSPITAL FOR CHILDREN, AND TO THE NURSERY AND CHILD'S HOSPITAL.

CALCIUM SULPHIDE IN AURAL DISEASES.—Bacon ("Arch. of Otolg.," xii, 2) has used the calcium sulphide in many cases of acute otitis media with great advantage. In several cases, where the membrana tympani was highly congested and bulging, all the inflammation subsided under the use of this remedy, and he believes that it will prevent the formation of many cases if given sufficiently early in the course of the disease. Its most decided action seems to be in those cases of otitis media in which the discharge has already commenced, as well as in cases of furuncles in the external auditory canal, where it will either arrest the inflammation and cause the boil to dry up, or it will promote suppuration and cut short the disease. The pain so frequent in these diseases, even when the periosteum is involved, is often relieved at once. In diffuse inflammation of the external auditory canal, and in mastoid disease, whether affecting the pneumatic cells or the periosteum and tissues externally, great benefit, according to Bacon, will be obtained from its use.

THE PRODUCTION OF ARTIFICIAL DEAFNESS, AND ITS BEARING ON THE ETIOLOGY AND EVOLUTION OF EAR DISEASES.—Cassells (*ibid.*) gives the results of his observations upon this subject, dating back to 1876, and formulates the following propositions: 1. A certain degree of tympanic tension is essential to perfect hearing. 2. The essential cause of all the affections of the organ of hearing is a disturbance of the normal tympanic tension. 3. All the pathological phenomena of the diseases of the ear evolve themselves with regular sequence. The measure of the

normal tympanic tension may be regarded as the difference between the air-pressure, at any level, upon the outside of the membrana tympani of a healthy ear, *plus* the traction force of the accommodating apparatus of the organ, on the one hand, and, on the other, the opposing air-pressure within the tympanum *plus* the resistance of the tissues. In considering the first and second propositions, Cassells found it necessary to prove that a disturbance in the tympanic tension *could* cause tissue-change in the structures of a healthy ear. To accomplish this he undertook some experiments in the production of artificial deafness on a man, aged forty-three, in a room at the temperature of 64° Fahr., in clear, dry weather. Two methods were used to disturb the balance of the tympanic tension. One, the Valsalvian method, was employed to increase the density of the air contained in the tympanic cavity. The other, known as Maissiat's experiment, was used for the purpose of rarefying the air in that cavity. The Valsalvian experiment gave no positive results, and the Maissiat method was then resorted to. A manometer was hermetically fixed in the outer orifice of the external meatus of the right ear. The act of swallowing was then performed by the patient in a deliberate manner, several times in succession, water being used to facilitate this process, during the performance of which the nostrils were open. No movement took place in the mercurial column of the manometer during this stage. The act of swallowing was then repeated as before, but with closed nostrils, and at the first act of deglutition the column of mercury in the manometer descended considerably. On this act being repeated a second time, it descended still farther, and, during its third repetition, the mercury was drawn altogether into the meatus. The first act of swallowing caused the membrana tympani to vibrate backward and forward several times, and then to recede a little, becoming at last visibly more concave, and accompanying this an immediate dullness in the general hearing. On a repetition of this act, the membrane became still more concave, and signs of congestion began to appear on its surface, along the anterior aspect of the handle of the malleus, and the patient experienced a general and deeper muffling of all sounds and a slight tinnitus. With the third act of swallowing with closed nostrils, the membrane was rigidly fixed, the congestion of its tissues rapidly increased, there was a complete muffling of all natural sounds; but the tie-tac of the watch was heard ringing out clearly and distinctly at an increased distance. The perception of aerial tones of the diapason, ranging from C¹ = 512 to C² = 1,024, held close to the ear, was almost completely extinguished; the perception of transmitted tones was slightly diminished. On the patient releasing his nostrils and swallowing a few times in succession, the membrane soon regained its normal position, and in an hour or so afterward the hyperæmia of its surface had diminished; the dullness of hearing lasted for some time afterward. The next stage of experimentation consisted in hermetically sealing up the orifice of one meatus, the other being left open. Maissiat's experiment was then again performed, and, after the act of deglutition had been performed three times in succession, all the previous sensations and appearances were experienced and seen on the membrane of the left and open ear, while in the right and closed ear no such sensations were felt. The moment, however, that the plug was removed from the meatus of the hitherto closed ear, similar sensations to those which had been felt in the left ear now made themselves known at once in the right ear, showing that the air in the cavity of the tympanum had been exhausted, and that the membrana tympani had been pressed in by the superabundant outside air-pressure. This conclusion Cassells tested in the following way: A pneumatic speculum was inserted into the orifice of the right meatus, that canal being hermetically closed by the instrument. The last stage of the ex-

periment was then repeated in all its details, and the membrana tympani inspected while these were being carried out. Scarcely any motion was to be seen in the membrane of the closed ear, and none of the subjective symptoms were called forth so long as the canal remained closed. On the left ear all the former symptoms were as prominent as ever. Air was now admitted to the canal of the hitherto closed ear, and the behavior of the membrana tympani watched. It was seen to be drawn in suddenly with a bang toward the tympanum and to remain in that position, its surface being very concave. All the former sensations and appearances were now felt in the ear and seen in the membrana tympani.

GALVANIC IRRITATION OF THE ACOUSTIC NERVE.—Kisselbach ("Arch. f. die ges. Phys.," xxxi, 7, 8) considers the origin and perception of vascular murmurs in general. 1. Vascular murmurs in the ear may occur as soon as the exit of the sound-waves is hindered (closure of the external auditory canal, etc.). 2. As soon as the murmur itself becomes abnormally loud (through increased supply of blood, roughness or bends in the walls of the blood-vessels). 3. When the irritability of the terminal filaments of the acoustic nerve is on the increase, or when there is a pathological hyperæsthesia of the same filaments. On the other hand, the vascular murmurs may be diminished by restoration of the normal exit for the sound-waves, or by diminution of the irritability of the terminal filaments of the acoustic nerve.

PYÆMIC ATTACKS AND ACUTE PURULENT INFLAMMATION OF THE TYMPANUM.—Moos ("Arch. of Otology," xii, 2) thinks that when attacks of pyæmia occur in the course of a chronic suppuration of the ear, we can judge more correctly of the history of the disease than when they occur in acute cases. In the first place, we are justified in assuming a diseased condition of the petrous bone, especially a gradually progressive caries, which favors the propagation of the disease to one of the sinuses of the brain. It is quite otherwise when these attacks occur during the acute stage of inflammation. If the case is not one of acute caries, associated with purulent inflammation of the tympanum, or if the presence and malign influence of micro-organisms in the inflamed parts can be excluded, the following theories of the condition must be considered: 1. Intermittent fever. This diagnosis could not be accepted in the case reported, for it is well known that the occurrence of new chills and increase of temperature contra-indicate the presence of intermittent fever. 2. Phlebitis and thrombosis of one of the veins or sinuses near the tympanum. This would scarcely be possible during the course of an acute affection of the middle ear, without the presence of certain abnormalities in the structure of the organ which would favor a rapid extension of the inflammation to the neighboring veins. Opposed to the theory of phlebitis and thrombosis of a large vein or sinus, there were in the case reported no observable metastatic centers of inflammation, such as are generally caused by the breaking down of a large thrombus. Upon the theory of a phlebitis and thrombosis of a small sinus—for instance, the superior petrosal—the non-discovery of embolisms in the parenchymatous organs is more easily understood. The course of the fever, also, and the variations of temperature contra-indicate an inflammation of a large sinus.

ŒDEMA AS A SYMPTOM OF PHLEBITIS AND THROMBOSIS OF THE LATERAL SINUS.—Moos (*ibid.*) regards this localized œdema as a symptom of rare occurrence, because the anatomical conditions on which it depends are peculiarities of development of an exceptional nature. He reports a case in a lady, aged thirty-three, with a chronic purulent discharge from the ear, which he followed up to her death. The symptoms pointed either to 1, abscess of the brain; 2, œdema of the brain; 3, meningitis;

4, thrombosis and phlebitis of the lateral sinus. In regard to abscess of the brain, as two days before there were no brain symptoms, its acute stage, being short, must have been worked by very violent symptoms, but such was not the case. The high temperature argues against this diagnosis. Œdema of the brain was excluded by the persistent cephalic pulse, and by the decided dilatation of the pupil on the affected side during the last hours of life. In view of these symptoms, and notwithstanding the absence of vomiting, Moos inclined to the diagnosis of meningitis, complicated by a phlebitis and thrombosis of the lateral sinus. The absence of chills was explained by the probable fact that the thrombosis had not yet broken down. The appearance of the œdema in the temporal and zygomatic regions assumes the existence of a petro-squamous sinus, and its communication on the one side with the sinus transversus, and on the other with the deep temporal vein, after passing through the temporal bone. These conditions, however, but seldom exist, and therefore œdema of the temporal region, as a symptom of thrombosis of the lateral sinus, will be of rare occurrence. Its diagnostic value, however, is as great as is that œdema over the mastoid process which appears after the extension of the thrombosis in the emissarium, which runs outward through the sigmoid fossa.

THE EFFECTS OF NOISE UPON DISEASED AND HEALTHY EARS.—Roosa (*ibid.*) believes that there is a large class of people suffering in quiet places from impairment of hearing who hear very acutely and with comfort amid a great din or noise. The disease causing the impairment of hearing thus relieved is situated in the middle ear. It is usually observed in the chronic, non-suppurative form of disease of the middle ear, but it may also be found in acute or subacute catarrh of this part, as well as in a chronic suppurative process with loss of the whole or a part of the membrana tympani. The proximate cause of this phenomenon is not as yet positively known. It is probably to be found in some change in the action of the articulations of the ossicula auditus. The hearing-power of persons working in such a din as that of a boiler-shop invariably becomes impaired. The lesion caused by this occupation is one of the labyrinth, or of the trunk of the acoustic nerve. Persons thus affected do not hear better in a noise. Their hearing-power is better in a quiet place, and becomes better after prolonged absence from the exciting cause of their impaired hearing. In diseases of the labyrinth or acoustic nerve, the tuning-fork "C" is heard louder and longer through the air than through the bones of the head.

THE MORPHOLOGY OF THE TENSOR TYMPANI MUSCLE.—Zuckerkandl ("Arch. f. Ohrenheilk.," xx, 2) has been making some investigations into the nature and mode of action of the tensor tympani muscle, with the following results: 1. The larger external portion of the muscular fibers passes into the tendon of the muscle, and hence traction of this portion of the muscle is always followed by a movement of the malleus. 2. A smaller, internal portion of the muscle, varying in thickness, does not pass into the tendon, but is inserted into the processus cochlearis on the external surface of the petrous bone. 3. The tendon of the tensor tympani muscle is connected with a band, which runs from the processus cochlearis to that point of the malleus in which the tendon itself is also inserted. To this band Magnus has given the name of "intervening band." 4. Some of the bundles of fibers of the tendon of the tensor tympani itself are so intimately united with the processus cochlearis that, even when the entire belly of the muscle is cut away, they remain behind with the intervening band as a stiff ligament. The tensor tympani in man is differently constructed from that of animals. The thick, fatty fat-nucleus in the fibers is absent. In animals these fatty bodies are constant occurrences, and are not the result of domestication. Its presence is not necessary to the

proper functional action of the muscle, for often the muscle contains connective tissue in place of the fatty bodies. This is not a fatty degeneration, the result of diminished activity, for in the almost inert muscles of the auricle of man there is not a trace of fatty degeneration to be found. It is possible that originally there were more muscular fibers in the tensor tympani than were necessary for the performance of the functions of the organ, and that the fatty deposit is the degenerated portion of a too luxuriant development of muscular fibers in the cavity of the middle ear.

New Inventions, etc.

IMPROVED NASAL AND AURAL INSTRUMENTS.

By GORHAM BACON, M. D.,

Aural Surgeon to the New York Eye and Ear Infirmary.

THE first wood-cut represents Duplay's nasal speculum as modified by M. Collin, of Paris. The instrument consists of two blades, one of which is fenestrated, and, after introduction into the nostril, is easily retained in position by adjusting the screw.

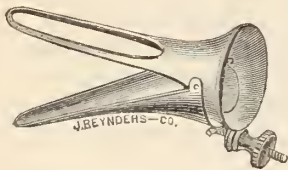


FIG. 1.

Messrs. Reynolders & Co. have made this speculum for me exactly similar to one brought from Paris.

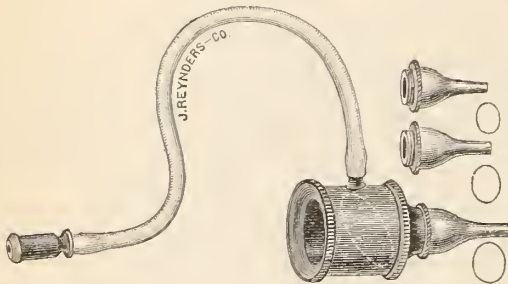


FIG. 2.

The second wood-cut shows Siegle's pneumatic otoscope, with the following modification: In place of the hard rubber, round speculum, like Politzer's or Wilde's, I have substituted a metallic speculum with the interior surface of the upper portion blackened. It is very similar to the Gruber speculum, with the exception that the upper end is made round and adjustable to the air-chamber of the otoscope. There are three sizes of these specula.

The advantages of this instrument are that the speculum is better adapted to the shape of the canal and more readily introduced. A much better view is obtained of the movements of the membrana tympani during condensation and rarefaction of the air.

Miscellany.

A LEECH IN THE LARYNX.—It seems remarkable that a leech should establish itself at the base of the epiglottis, and be perched upon the arytenoid cartilage, without a warning note to arouse the unwilling

host. We infer, however, that in the instance recently observed by M. Vieusse, such lack of knowledge on the part of the sufferer must have been the case from reading that the laryngoscope was employed to make clear what was the cause of incessant hæmoptysis, dysphagia, and dyspnoea in the case recorded. The mirror revealed the blood-sucker in the situation already indicated. It is satisfactory to know that the patient was relieved of his symptoms and of the leech by means of a pair of Cusco's forceps.—*Lancet*.

ARMY INTELLIGENCE.—*Official List of Changes of Officers serving in the Medical Department of the United States Army from November 17, 1883, to November 24, 1883.*—MOORE, JOHN, Lieutenant-Colonel. Relieved from duty as Medical Director Department of the Columbia. G. O. 29, Department of the Columbia, November 8, 1883. — BACHE, DALLAS, Major and Surgeon. Assigned to duty at Fort Adams, R. I. Par. 5, S. O. 215, Department of the East, November 19, 1883. — BROOKE, JAMES, Major and Surgeon. Relieved from duty at Angel Island, Cal., and assigned to duty as Post Surgeon, Presidio of San Francisco, Cal. Par. 1, S. O. 162, Department of California, November 14, 1883. — HORTON, SAMUEL M., Major and Surgeon. Leave of absence granted October 20, 1883, extended three months. Par. 7, S. O. 266, A. G. O., November 20, 1883. — TOWNS, F. L., Major and Surgeon. Until further orders, to perform the duties of Medical Director Department of the Columbia. G. O. 29, Department of the Columbia, November 8, 1883. — WILLIAMS, JOHN W., Major and Surgeon. Granted leave of absence for one month on surgeon's certificate of disability, with permission to leave the limits of the department. Par. 5, S. O. 157, Department of the Columbia, November 12, 1883. — APPEL, D. M., Captain and Assistant Surgeon. Granted two months' leave of absence. S. O. 68, Division of the Atlantic, November 16, 1883. — MUNN, CURTIS E., Captain and Assistant Surgeon. Assigned to duty at Fort Warren, Mass. Par. 4, S. O. 216, Department of the East, November 20, 1883. — WINNE, CHARLES K., Captain and Assistant Surgeon. Relieved from duty at Fort Winfield Scott, Cal., and assigned to duty as Post Surgeon, Angel Island, Cal. Par. 1, S. O. 162, Department of California, November 14, 1883. — APPEL, A. H., First Lieutenant and Assistant Surgeon. Relieved from duty at Fort Warren, Mass., and assigned to duty at Madison Barracks, N. Y. Par. 4, S. O. 217, Department of the East, November 21, 1883. — COCHRAN, J. J., First Lieutenant and Assistant Surgeon. Assigned to duty at Fort Bayard, N. M. Par. 5, S. O. 236, Department of the Missouri, November 15, 1883. — RICHARD, CHARLES, First Lieutenant and Assistant Surgeon. Relieved from duty at Fort Adams, R. I. Par. 3, S. O. 216, Department of the East, November 20, 1883. — WILSON, GEORGE F., First Lieutenant and Assistant Surgeon. To report in person to Lieutenant Schwatka, Third Cavalry, aide-de-camp, for temporary duty in connection with the completion of report of recent expedition to Alaska. Par. 3, S. O. 156, Department of the Columbia, November 9, 1883.

NAVAL INTELLIGENCE.—*Official List of Changes in the Medical Corps of the Navy during the week ending November 24, 1883.*—MEDICAL INSPECTOR STEPHEN D. KENNEDY, dismissed the service by sentence of a general court-martial.

SOCIETY MEETINGS FOR THE COMING WEEK.—*Monday, December 3d:* New York Academy of Sciences (Section in Biology); Brooklyn Anatomical and Surgical Society (private); Medico-Chirurgical Society of German Physicians (annual); Morrisania Medical Society (private); Utica (N. Y.) Medical Library Association. *Tuesday, December 4th:* New York Neurological Society; New York Obstetrical Society (private); Buffalo Medical Association; Elmira (N. Y.) Academy of Medicine; Ogdensburg (N. Y.) Medical Association; Medical Societies of the Counties of Herkimer and Saratoga, N. Y., and Hudson, N. J. *Wednesday, December 5th:* New York Medico-Legal Society; Medical Society of the County of Richmond, N. Y. *Thursday, December 6th:* New York Academy of Medicine; Society of Physicians of the Village of Canandaigua, N. Y. *Friday, December 7th:* Practitioners' Society (private). *Saturday, December 8th:* New York Medical and Surgical Society (private).

Lectures and Addresses.

LECTURES ON DISEASES OF THE KIDNEYS,

DELIVERED AT THE COLLEGE OF PHYSICIANS AND
SURGEONS,

By FRANCIS DELAFIELD, M. D.,
PROFESSOR OF PATHOLOGY AND PRACTICAL MEDICINE.

LECTURE V.

Chronic Parenchymatous Nephritis.—Acute Diffuse Nephritis.

GENTLEMEN: The next form of kidney disease we come to is *chronic parenchymatous nephritis*. In this disease we have essentially the same lesion as in acute parenchymatous nephritis—that is, the morbid changes are confined to the epithelium of the tubes and the epithelial cells of the Malpighian bodies. The blood-vessels and the stroma of the kidneys and the capillary vessels are unchanged. In these cases the kidney is apt to be increased in size, and sometimes very considerably. The capsules are non-adherent, and, when pulled off, the denuded surface remains smooth. The cortical portion of the kidney is thicker than natural, and its color is changed. It is whiter than usual, the pyramids are of natural size or else a little swollen, they are usually quite red, and this contrasts with the white appearance of the cortex. When we examine the kidney more minutely we find well-marked changes in the epithelium of the tubules, and in the epithelial cells lining the Malpighian bodies and the cells covering the tufts of capillary vessels contained in the Malpighian capsules. These changes are especially marked in the convoluted tubes, but are also found in the straight tubes. We also find cast matter, and occasionally a little blood in the kidney tubules.

Some of these cases, and especially those that follow upon an attack of acute parenchymatous nephritis, occur idiopathically, but others occur as a secondary or complicating condition, and sometimes begin as a chronic disease. Where the lesion follows an acute inflammation, this, instead of terminating in recovery with the return of the kidney to its natural condition, continues to advance, and the changes go on for months and years. But in other cases the lesion develops as an idiopathic chronic lesion from the first.

Chronic parenchymatous nephritis is not a very common kidney lesion, and it is perhaps the least frequently seen of any of the four different varieties of Bright's disease.

When the disease does occur, the urine generally shows changes. The quantity is usually very irregular—that is, sometimes for days and weeks in succession the patients will pass too much urine, and then, at other times, they will pass too little. There may be eighty or ninety ounces passed at one time within the twenty-four hours, and at another time it may be diminished to three or four ounces in the twenty-four hours in the same patient. The specific gravity of the urine is not usually very much changed;

sometimes it is normal and sometimes a little below or a little above the normal. There is nothing characteristic in the specific gravity. Albumin is usually present in very large amount, and there may be from 50 to 70 per cent. of it in the urine almost every day. But there are a few cases in which the albumin will be present in much smaller amount, and there will only be from 5 to 10 per cent. present every day. And then there are still other cases in which it will be absent altogether for a number of days, and then it will return again. Casts can usually be found in the urine, most frequently hyaline and granular casts, but occasionally epithelial casts, and especially in cases where the disease undergoes an acute exacerbation. For, although this disease runs a chronic course, it is liable to undergo acute exacerbations, and then the epithelial casts will appear, and there may also be blood present in the urine.

In most cases dropsy is present, and it is usually well marked, but it varies in amount during the course of the disease, and it comes and goes. It may diminish and nearly disappear for a while and then come back again, and so it may go on, and in the course of the months and years during which the disease lasts the dropsy may come and go a great number of times.

These patients also lose their appetites, and are troubled with nausea and vomiting; and they may have uræmic attacks, during which they present the ordinary symptoms of headache, twitchings of the voluntary muscles, general convulsions, stupor, coma, spasmodic dyspnoea, and persistent and repeated attacks of vomiting. When these uræmic attacks come on there is usually at the same time a diminution in the amount of urine—it may be scanty or entirely suppressed.

Quite frequently these patients suffer from a chronic bronchitis as a complicating condition, and this gives rise to a cough with a mucous or muco-purulent expectoration. The course of the disease is usually quite slow; it may be for months, or it may last for years.

In some of these cases we may have—accompanying the changes in the urine and the changes in the blood, which give rise to the anasarca—a loss of appetite and a loss of muscular strength and of mental energy, and these may be the principal symptoms throughout the course of the disease; there may be little else, unless the disease goes on and becomes worse, then at length other symptoms will be added. In other cases the dropsy is developed early, and is the most marked symptom throughout the course of the disease. Some patients retain a fair appetite, their mental condition remains good, they manifest a fair amount of bodily activity, and they do not appear to be suffering from anything except the dropsy. In these cases the dropsy, after appearing and increasing to a certain degree, may then disappear, remain absent for weeks and months, and then at last come on again. In other cases the attacks of cerebral symptoms may come on very frequently and form a more prominent feature of the disease. In many cases there will be intervals when all the symptoms will disappear for a time and the patient is apparently

perfectly well, except that the urine does not return to its natural condition, and then, after a while, the other symptoms will come back again and be present the whole time.

So these patients go on for a long time, some of them ultimately recover, the symptoms all disappear and do not come back again, after a time the urine too returns to its natural condition, the kidneys also apparently are restored to their original state, and so the patients get permanently well. But more frequently we do not get such a favorable result, but the patients, after going on for several years, then gradually get worse and worse, the dropsy becomes persistent and does not go away again, permanent changes take place in the general nutrition and the condition of the blood, and they finally die, either in a state of extreme dropsy or in a uræmic attack.

The prognosis in these cases is not good, but still it is not altogether bad. It is possible for a patient to recover even after this condition of the kidneys has lasted for several years.

The treatment of these cases resolves itself for the most part into a treatment of symptoms, and an endeavor to put the general health in the best possible condition to enable the patients to go on living comfortably while the kidney disease is running its course. We try to get rid of the dropsy by the ordinary means: by the use of diuretics, cathartics, sweatings, and the administration of drugs that increase the force of the heart's action, so that it can send a larger amount of blood to the kidneys. The loss of general nutrition and the anæmia are treated by providing the patients with food that can be easily digested, and with such drugs as will diminish the gastric and intestinal symptoms; and, for the condition of the blood, iron and oxygen may be used. The cerebral attacks are to be treated again like the dropsy: by the employment of cathartics, diuretics, sweatings, and drugs that increase the force of the heart's action and so send a larger amount of blood to the kidneys, and also such as relax the capillaries; and, in addition to these measures, opium may be given in sufficient quantities to induce sleep and quiet the restlessness. Still more than this you can do for those patients in whom it is possible to regulate their manner of living. You should send such patients to spend the cold winter season in a warmer climate, and tell them to travel about a good deal, and in this way you can try to brace up their general health, and so improve the renal condition also.

The next lesion of the kidneys we come to is *acute diffuse nephritis*. When a patient dies of this disease, at the autopsy we find that the kidneys are regularly increased in size, and usually this increase in size is very considerable, so that the two kidneys together will weigh from sixteen to twenty, or even twenty-four ounces. The capsules of the kidneys are non-adherent, and the surface feels smooth and regular after stripping off the capsules. When we cut open the kidney we find in some cases that there is a general congestion of the whole organ, and it appears everywhere of a uniform red color, and this congestion involves not only the kidney tissue itself, but also the mucous membrane of the pelvis of the kidney, and, besides, there may also be extravasations

of minute quantities of blood into the kidney tissue. In other cases the kidney, instead of showing a general congestion, will have its cortical portion of a uniform white color, or it may be mottled by little red spots, due to minute extravasations of blood. In all cases the cortical portion is thicker than it should be, and this accounts for the increased size of the kidney. The tissue of the kidney is also more succulent and moist than it should be, and, when we cut it open, serum and blood exude; and, when we take a portion of it between our fingers and move them about, it feels more succulent than natural, and as if infiltrated with an unusual amount of serum. When we examine the kidneys more minutely, we find, in the first place, that there are marked changes in the epithelium of the tubules, and these changes are not confined to the cortex, but they also extend to the tubules of the pyramids. In a large part of all the tubules the epithelium is swollen, granular, broken down, and degenerated, it is disintegrated and detached from the walls of the tubes, and there is also a considerable amount of cast matter in the cavity of the tubes, and sometimes there is blood also. But the basement membrane of the tubules is not altered, except that the whole tube may be increased in size by reason of the distension from the detached epithelium and the cast matter in it. When we come to look at the Malpighian bodies, we find that they are increased in size, and there is a very marked growth of cells within their capsules; they are large, flat, nucleated cells, resembling those which normally line these capsules. These cells may be present in such large numbers as to compress and push to one side the vessels in the tufts of the Malpighian capsules. When we look at the stroma of the kidney, we find that it is infiltrated with serum and a moderate number of pus corpuscles, and at the same time the connective-tissue corpuscles which belong naturally to the stroma are swollen. Such an infiltration of the stroma with serum, pus corpuscles, and connective-tissue corpuscles, is found both in the cortical and in the pyramidal portion of the kidney. The production of pus corpuscles, however, is never carried to such an extent as to cause the formation of real abscesses, but there is simply a diffuse infiltration of the stroma, with only a moderate number of pus corpuscles. These, then, are the lesions of the kidney that we get in acute diffuse nephritis, and you will observe that they are more decided and extensive than in cases of acute parenchymatous nephritis.

As regards the causes of acute diffuse nephritis, we find that in a considerable number of cases we shall have a distinct history of exposure to cold and wet, but in other cases there will be no such history, and we shall be unable to discover any direct cause. With scarlet fever we find that acute diffuse nephritis is a tolerably common complication, and, moreover, I have lately found that, in some cases of acute pulmonary phthisis, acute diffuse nephritis also exists as a complicating lesion.

As regards the idiopathic cases of acute diffuse nephritis occurring after exposure to cold or wet, or from some unknown cause, where there is no scarlet fever or other primary disease, we find that they all group themselves easily into two sets of cases, according to the character of

the symptoms in each. The changes in the kidneys are apparently the same in both sets, but the symptoms in each are different. In the first place, we find a group of cases characterized by an acute invasion of the disease. Thus, a person feeling in ordinary good health will suddenly be attacked by rigors, and this will be followed by a febrile movement, in the same way as we are apt to have ushered in an attack of pneumonia, or acute tonsillitis, or some other acute inflammation of a viscus. After a short time the patient also begins to suffer from frequent micturition, feels a desire to pass water very frequently, suffers a good deal of pain in doing so, and passes but a very small quantity each time. This seems to be due in most cases to a complicating cystitis, and not so much to an inflammation of the kidneys as to an acute catarrhal inflammation of the mucous membrane of the bladder, which is developed at the same time and complicates the case. In this set of cases the urine is at first very small in quantity, and only a few ounces may be passed in the twenty-four hours, and sometimes for twenty-four, thirty-six, or forty-eight hours there will be absolutely no urine passed at all; there will be complete suppression. In certain cases this suppression of urine may last for a longer time still. There are on record cases in which such a suppression has lasted for many days, or even for weeks, at a time. But most cases only persist for a moderate number of hours, and then the urine reappears. When the urine is passed, we find its color changed by the admixture of blood with it. If the blood is present in large quantity, the urine is distinctly of a bloody-red color; but if it is only in small quantity, the urine will simply be of a brownish or smoky color. Although the urine is passed in such small quantities, yet its specific gravity is regularly diminished. It is lower than it normally is, even when there is an abundance of urine. Albumin is present in very large proportion, and sometimes, when examined, all the urine in the test-tube will seem to be solidified by boiling and by the addition of nitric acid. It is always present in very considerable amount. The blood which gives the color to the urine is found in the urine, when examined by the microscope, either in the form of round blood corpuscles scattered about irregularly in all parts of the field, or else it may appear in the form of blood casts—that is, in little cylindrical accumulations of blood formed in the kidney tubules that have not become disintegrated by their suspension in the urine. All kinds of casts are present during the course of the nephritis; there are hyaline, nucleated, granular, and epithelial casts. Renal epithelium is also present in a considerable number of cases, but this must never be confounded with the epithelium from the bladder and from the pelvis of the kidney, which closely resembles it in appearance, and which is apt to be present because of the catarrhal inflammation of the bladder and of the mucous membrane of the pelvis of the kidney.

In this set of cases dropsy is developed within a very short time—usually in the first twenty-four hours, but sometimes not till a little later. It is a dropsy which begins in the face or the legs, and then rapidly spreads over the extremities until it at last involves the subcutaneous connec-

tive tissue throughout the whole body, and with this there may be also an accumulation of fluid within the serous cavities of the peritonæum, the pleura, and the pericardium. So these patients may develop a general dropsy of considerable extent in a very short space of time.

These patients lose their appetites at once, and often there is an addition of more or less nausea, and there may be vomiting. They also develop the peculiar nervous dyspnoea that belongs to the different kinds of Bright's disease, and this may render itself more marked by reason of an accumulation of serum in the pleural cavities, or the setting in of œdema of the lungs, and sometimes by such an œdema complicating a previously existing pleurisy.

Cerebral symptoms are regularly present to a greater or less degree. They are the ordinary cerebral symptoms of Bright's disease—headache, dizziness, stupor alternating with restlessness and an inability to sleep, and sometimes they go on to delirium, and twitchings of the voluntary muscles, and general convulsions; and, in very bad cases, the condition of stupor finally deepens into complete unconsciousness or coma.

In some cases the condition of the patient will be rendered still worse by reason of the addition of some complicating inflammation, such as a bronchitis, a broncho-pneumonia, a lobar pneumonia, a pleurisy with the production of fibrin, or else a pleurisy with effusion; or there may be a peritonitis, a pericarditis, or, as an exceptional condition, an endocarditis characterized by the rapid production of vegetations on the valves of the heart. One of the last cases of acute diffuse nephritis which I observed presented this complication, and in this case the course of the disease was rendered somewhat peculiar, from the fact that some of these vegetations on the valves of the heart became detached and found their way into the aorta in considerable numbers, and finally became lodged in the branches of the splenic artery, and so filled up nearly all of them; and, as a result, there was death of nearly the whole spleen. Nearly the whole organ became necrosed as a result of this occlusion of the splenic arteries, and this had been followed by a softening of the spleen, and the necrosed matter had ruptured through the splenic capsule and found its way into the peritoneal cavity, and there set up a general peritonitis, which was the immediate cause of the patient's death. The sequence here was, first, an acute diffuse nephritis, then an acute endocarditis, then a detachment of vegetations from the valves and a filling up of the arteries of the spleen with them, then a necrosis of the spleen and a rupturing of its capsule, and, finally, a setting up of a general peritonitis, which was the immediate cause of death.

There is a good deal of difference in the different cases of this form of acute diffuse nephritis as to the severity of the symptoms. Some cases run a comparatively mild course. They present the different symptoms and the usual number of them, but they show no very great degree of severity. The febrile movement is not very high at any time, the disturbances of the stomach are not very marked, the urine is not suppressed, but only diminished in quantity, the dropsy reaches no very great degree of severity, and the cerebral symptoms manifest themselves only by head-

aches, restlessness, sleeplessness, and stupor, alternating with these other symptoms. But in other cases the symptoms are very well marked indeed. The febrile movement reaches a considerable degree early in the disease, the urine is suppressed absolutely, vomiting is incessant, the dropsy is very considerable in degree, the cerebral symptoms are very marked, there are repeated attacks of convulsions, and the patient finally dies, either in a convulsion or in a condition of complete anasarca. So we get in the different cases all sorts of degrees of severity of the development of the different symptoms, though all the symptoms are regularly present, to a greater or less extent, in every case.

In the worst cases the duration of the disease is short, and the patient dies within a few days, or by the end of a week. But in the milder cases the duration is apt to be longer, and the symptoms, after continuing for two or three weeks, then gradually subside. In very mild cases the symptoms sometimes subside very promptly, in two or three weeks from the onset of the disease the patients are apparently entirely well, the dropsy has disappeared, there is no longer any blood in the urine, it is passed in the normal quantities, the appetite returns, the breathing becomes natural, and the general health is improved, but yet the composition of the urine remains abnormal for a long time after, and a small amount of albumin and a few casts can often be found for months after all the other symptoms have disappeared. But in other cases the subsidence of the other symptoms is not so complete. The dropsy does not entirely go away, the appetite remains poor, the patient is still anæmic, feels somewhat prostrated and not strong enough to go on with his usual work. These symptoms continue sometimes for months, then it is possible for the kidneys to return to their natural condition again, and the patient gets entirely well at last. Then, too, there are a few cases of acute diffuse nephritis which constantly present very marked symptoms, and yet the prognosis is really good, and the patient will ultimately get entirely well. Most of these severe cases, however, die. Some of them die in convulsions, some comatose, some from one of the complicating inflammations, and, finally, some of them go on to have chronic diffuse nephritis.

As regards the treatment of this class of patients, the first thing to be done is to put them to bed. Usually they are ready enough to go to bed without any persuasion, for they feel distinctly sick, as in cases of acute inflammation of one of the viscera. After getting them to bed, you may then put them on a fluid diet, usually of milk, and after that you must pay attention to the condition of the kidneys. About the only way we seem to be able to exert any direct influence over the inflammation of the kidneys is by the use of counter-irritation to the skin over the position of the kidneys—that is, in the lumbar region. There are several different ways of applying counter-irritation. If the patient is strong and robust, we may take blood pretty freely by means of cups. Thus from four to six wet cups may be applied to the back, and you may abstract all the blood you can in this way; and then, after they have ceased drawing and have been taken off, you may apply a hot poultice over the same

region, so that the blood may continue to flow for a longer time, and by this means you also are doing good by applying heat and moisture to the inflamed kidneys. If, however, the patient is not strong enough to warrant you in taking blood, then you may make use of dry instead of wet cups, and, after removing them, apply the hot poultice as before. Poultices or hot fomentations over the region of the kidneys do seem to have a real effect in controlling the congestion of the kidneys, and the same thing is true of dry and wet cuppings. So if in any case you can not employ cups at all, then you can make use of hot fomentations alone with good effect.

A large flaxseed poultice, big enough to cover the whole lumbar region, answers tolerably well for this purpose. But a more effective means is by the use of a poultice made of spongio-piline, a preparation of sponge spread out on a rubber surface, and this makes a very convenient means of applying heat in these cases. The best way of preparing it is to cut a piece of spongio-piline about a foot square, and then put this in a basin of boiling water, and, as it is too hot for the hands, the spongio-piline must be handled with forceps; then, besides, you should have ready a towel and an ordinary wringing-machine, such as is used in laundries, with two rollers rubbing on each other and turned by means of a crank; then take the spongio-piline out of the water, put it in the towel and pass it through the wringing-machine, and then put it at once on the patient's back. In this way you can apply a greater degree of heat than you are able to apply in any other way. After the first application has cooled off you can put on another and repeat it as often as necessary. If these remedies act as you wish them, by diminishing the congestion of the kidneys, the evidence of this is an increase in the amount of urine becoming apparent within a few hours after the application of the cups and the heat, and if within a reasonable time there is no such increase in the urine, it is probable that these remedies have failed to act. Another way by which you can try to effect the same result is by putting the patient in a hot-air bath and so applying heat to the whole surface of the skin, and in this way you may relieve the congestion of the kidneys. And by this treatment you sometimes effect a double purpose, not only by relieving the congestion of the kidneys, but also by relieving the venous congestion over the whole body by taking away a certain amount of the serum of the blood. Where you are dealing with children you can put them into an ordinary warm bath, and then, on taking them out, wrap them up warmly in a number of blankets, and so allow them to sweat. These seem to be the most efficient remedies at our disposal for endeavoring to remove or diminish the intensity of the inflammation of the kidneys. Then, besides these measures, you can try to act on the bowels, and for this purpose you can give cathartics. And if you can not produce the desired effects in any other way, you can still try the hypodermic injection of pilocarpine. As the patient gets better of the renal disturbances, then you should give your attention to building up the general health, and warn the patient to take care that he does not have a relapse from any imprudence or undue exposure.

Original Communications.

REFUSION

IN

CARBONIC-OXIDE POISONING.*

BY WILLIAM S. HALSTED, M.D.,

ASSISTANT SURGEON TO THE ROOSEVELT HOSPITAL.

CONTRIBUTIONS to the treatment of patients poisoned by carbonic-oxide, the most noxious constituent of coal and illuminating gases, are especially worthy of consideration because of the great frequency of and mortality from this form of poisoning. In Adolph Lesser's † tables carbonic oxide figures as the most common poison, and the one which yields the highest percentage of fatal cases.

Refusion of blood is literally a depletory transfusion, in which the blood withdrawn is returned to the circulation of the loser. Volkmann, ‡ in discussing exarticulation at the hip joint, suggests the feasibility of catching the blood lost, peradventure, in this operation, and returning it to the loser through the divided femoral vein. And Esmarch # has, in one instance, endeavored to act in accordance with Volkmann's suggestion, but his patient died while preparations were being made for transfusion. Hueter, || in frost-gangrene of both feet, transfused centrifugally 350 c. c. of the patient's own blood, defibrinated, into the left posterior tibial artery, and believed that he thereby preserved a portion of the frozen part. The right foot, untransfused, underwent an extensive forfeiture.

Highmore, ^ evidently not aware that it had already occurred to others to refund blood, offers "remarks on an overlooked source of blood supply for transfusion in post-partum hæmorrhage," and recommends utilizing the blood lost by the mother. Other than these I know of no hints or attempts at refusion.

In carbonic-oxide poisoning, refusion involves an additional factor, viz.: the oxygenation of the poisoned blood employed; and is, therefore, an infusion of the purified, defibrinated for the poisoned, entire blood of the individual.

A most radical case of refusion is the following:

On the 15th of last May, Mr. A. S. G., aged fifty-seven, a man of medium size and good physique, was found unconscious in a state-room of the steamer Bristol by the ticket-taker, who observed a strong smell of gas in the room. He was taken in an ambulance to the Chambers Street Hospital, where he arrived at 9.05 A. M. The house-surgeon states that, on admission, the patient could not be aroused. Respirations superficial; pulse fairly strong, and 85 beats a minute; temperature not

taken. Skin pale and cold; lips slate-colored; pupils somewhat dilated. Was put in a hot-air bath and given whisky hypodermically. At 10.30 A. M., when I first saw the patient, he was still comatose. His eyes were partly open, and his pupils equal, slightly contracted, and irresponsive to light; face ashy pale, and surface of body cold. The respirations, 28 a minute, were abdominal and so superficial that it was almost impossible to count them; pulse 96, small and easily compressible. Feeble conjunctival and plantar reflexes; other superficial reflexes absent, except cremasteric on left side. Deep reflexes could not be tested because of the rigidity which existed. Both arms were flexed; the right more strongly than the left. 10.50 A. M.: right radial artery exposed above wrist for about one inch, and two ligatures passed under it.

A cannula, introduced centripetally into the artery, was held in place by one ligature; the other was used to occlude the vessel peripherally. Through the cannula 512 c. c. of blood were withdrawn, defibrinated, strained, and kept at a temperature of about 37.5° C. in a transfusion apparatus similar to that which is before you. 11.20 A. M.: temperature 35.4° C. (95.8° F), pulse 92, respiration 22, full and dyspnoic. Superficial reflexes well pronounced. Eyes closed, but patient can be made to open them. Rigidity of limbs has, in great measure, disappeared. 11.32 A. M., 288 c. c. of defibrinated blood, all that could be obtained from the 512 ccm., were refunded through the cannula in the artery toward the heart—centripetal arterial infusion. At 11.45 the injection was completed. Temperature 36.6° C. (98° F.), pulse 104, respirations 28, deep and labored. Superficial reflexes possibly exaggerated. The usual post-transfusion rigors lasted for half an hour. 12.35 P. M.: 300 c. c. withdrawn, as before, through the cannula, defibrinated and mixed with 128 c. c. of defibrinated blood taken from another patient. 1 P. M.: temperature 38.2° C. (100.8° F.), pulse 128, respiration 28. 1.05 P. M.: patient's pallor most striking; 192 c. c. of the mixed blood infused. The color returned rapidly to his face when from 80 to 100 c. c. had been injected, the change from a deathly white to a healthy red taking place in a few seconds. 1.13: temperature 39.1°, pulse 120, respiration 40. 2.30: temperature 39.4°, pulse 140, respiration 40. 5.20: temperature 37.8°, pulse 116, respiration 20.

Patient has been gradually returning to consciousness since the first venesection, and now attempts to get out of bed.

May 6th.—12.15 P. M.: urine voided voluntarily for the first time since admission, it having previously been drawn with a catheter.

8.20 A. M.: temperature 37° (normal), pulse 98, respirations 20. Patient in good condition, but mentally still a little dull. 4.30 P. M.: patient eats well, and desires to go home.

May 7th.—Intellect perfectly clear; remembers that the steward lighted the gas in his state-room about 9.30 P. M., the night previous to his poisoning, but that it went out as the door was closed. Undressed himself in the dark, went to bed, and can recall nothing of the night. Has experienced none of the unpleasant after-effects of the poisoning.

Allowed to go home to Warcham, Mass., about 50 hours after admission. . . . October 24th, have to-day, 5½ months after the poisoning, interviewed Mr. A. S. G., and ascertained that he has not had a single unpleasant symptom referable to the effect of the gas.

That this patient would have recovered without such active treatment is not improbable. It is, nevertheless, certain that the blood-letting exerted a most favorable influence, changing almost instantly the entire aspect of the case. The scarcely perceptible respirations became at once conspicuously full; in a few moments the absent superficial

* Read before the New York Surgical Society, November 13, 1883.

† Virchow's "Archiv," lxxiii, 2, 1881, p. 193.

‡ R. Volkmann. "Drei Fälle von Exarticulation des Oberschenkels im Hüftgelenk." "Deutsche Klinik," 1868, p. 382.

H. Leisrink. "Ueber die Transfusion des Blutes." Volkmann's "Sammlung klinischer Vorträge," No. 41. Landois, "Die Transfusion des Blutes," p. 327.

|| E. Peters. "Die arterielle Transfusion und ihre Anwendung bei Erfrierung," Greifswald, 1874.

^ "Lancet," London, 1874, i, p. 89.

reflexes had returned and the rigid arms relaxed. The body-surface grew gradually warmer, and, after the first infusion, the temperature had risen from 35.4° C. to 36.6° C. The pulse and respirations kept pace with the temperature. The first infusion prepared the subject for a second depletion, and contributed to the rise in temperature, and, probably, to the improved circulation. The second infusion was decidedly indicated, as evidenced by the impression it produced in the patient's color.

In the light of Kühne's* experiments on animals, it is a question whether the blood-letting alone would not have rescued all the cases of carbonic-oxide poisoning in the human subject in which a depletory transfusion has been successful. Kühne (*loc. cit.*) has found that venesection of itself could save life if the respirations were as much as two in a minute. From twenty-three cases of transfusion for carbonic-oxide poisoning, of which I have notes, twelve terminated favorably. In two (Casse,† one; Lühe,‡ one) of the twelve successful cases very small quantities of blood were transfused, and without any immediate good effects. In one (Hüter#) of the remaining cases attempts at depletion were unsuccessful, only a few drops of blood having been withdrawn. In three cases (Garrigues,|| one; Halsted, two) the venesection exerted a decidedly favorable influence. Three cases (Badt,^ one; Martin,◇ one; Lehmann,‡ one) are narrated in articles to which I have not access, and so can not arrive at any positive conclusions as to which was the more efficacious agent, the venesection or the transfusion. In one case (König †) the venesection (the amount of blood withdrawn is not stated) was attended with slight, and the transfusion with no success. The two remaining cases (Jürgensen,‡ one; Saltzmann,** one) were apparently benefited by the transfusion, and yet in neither is any reference made to the influence of the depletion, although from one (Jürgensen) 400 c. c., and from the other (Saltzmann) 180 ccm., of blood were abstracted.

Some, then, of the cases claimed for transfusion seem attributable to the venesection which preceded it; and in no instance has it seemed to me clearly demonstrable that transfusion has saved life where venesection had failed.

A few cases are reported by O. Kahler,†† Marten,‡‡ and others,## of venesection in carboxysmus with good results.

* "Centralblatt f. Chir.," 1864, No. 9.

† "Presse méd.," xxviii, 8, 1876.

‡ Transfusion bei Kohlenoxyd Vergiftung mit günstigem Ausgang "Deutsche mil. aertzl. Ztschr.," Berlin, 1878, vii, 263-267.

"Berl. klin. Wochenschr.," 1870, No. 28.

|| "New York Med. Journal," March 3, 1883.

^ Badt, "Verhandlungen der berl. med. Gesellschaft," i, 1866.

◇ Massmann (B. W.), "Beiträge zur Casuistik der Transfusion des Blutes," Berlin, 1870.

‡ Massmann (*loc. cit.*).

↓ Evers, "Deutsche Klinik," 8, 9, and 10, 1870.

‡ "Berl. klin. Wochenschr.," 1870.

** Fall af högggradig Kolosforgiftning, behandladt med. Transfusion.

"Finska Läkaresällskapet Handl.," Bd. 19, p. 266.

†† O. Kahler, Virchow's "Jahresb.," 1881, 1, p. 420.

‡‡ Marten, "Vjhrschr. f. g. Med.," xxv, 1864, pp. 197-221.

Henrick Jensen, in Helsingör, "Hospitals-Tidende," 2, R. 1, 25, 26, 1874, reports a case of carbonic-oxide poisoning which is interesting from the fact that decided reaction was observed during a brief men-

And, of the several cases which have come under my care, I will cite briefly, in proof of the efficacy of venesection, the most serious (one in which depletory transfusion was resorted to):

On May 5, 1882, at 10.10 A. M., Lillie Bent, a robust girl of seventeen, was admitted to Chambers Street Hospital, suffering from illuminating-gas poisoning. The night before, on retiring, she is supposed to have blown out the gas in her state-room on the steamer Providence.

On admission, she is said to have been unconscious, moaning, and much cyanosed. Her respirations were shallow, and her pulse rapid and feeble. Temperature not taken.

Whisky and digitalis were given hypodermically. She was put in a hot-air bath and hot cloths were applied to the præcordia. Flagellation and the inhalation of ammonia would partially arouse her. Artificial respiration was tried, but with what effect is not stated. She would improve temporarily under the treatment, but when left alone returned to her previous condition.

I saw her about 5 P. M. Her temperature was 39.1° C., respiration 40, and pulse 120. Advised washing the stomach and large intestine with hot water for the purpose of further stimulation.

9 P. M.: Patient much worse. Pulse feeble, more rapid and intermittent; respirations very superficial; conjunctivæ insensitive and all reflexes absent; mouth frothy; occasional facial twitchings and grinding of the teeth; arms and legs rigid—the flexor muscles overpowering the extensors.

9.05 P. M.: 204 c. c. of blood withdrawn from left basilic vein; upon this the condition of the patient improved marvelously; almost instantly her respirations became full and her pulse strong and less rapid. The rigidity of her limbs disappeared, her reflexes returned, and she could be aroused by shaking or speaking loudly to her.

11 P. M.: Attempted to transfuse entire blood from a Biehler's apparatus into patient's right cephalic vein, but failed to introduce more than 50 c. c.

May 6th.—During the night nourishment was administered per rectum. At 6 A. M. patient answers questions somewhat intelligently, and at 9 A. M. takes nourishment by the mouth.

May 7th.—Feels well but weak.

It is difficult in any case to know precisely how much of the cure should be attributed to the treatment. When, however, a case like the one just narrated, observed sufficiently long to exclude fluctuation, assumes a decidedly more serious aspect, and then is, almost instantly, on treatment, transformed into rapid convalescence, one feels justified in assigning a cause to the effect.

Many apparently severe cases of carbonic-oxide poisoning are recorded, which have recovered more or less promptly when exposed to fresh air and stimulation. Some, too, where oxygen* is believed to have hastened the convalescence. But if, despite these measures, the patient's condition grows constantly worse, death is virtually certain, unless venesection be resorted to.

struation. (Strange that venesection was not suggested to him by this occurrence). Lauz in Biel, "Schweiz. Corr.," Bl. i, 12, p. 324, 1871.

* Virehow's "Jahresb.," 1869, i, p. 320. Alonzo Clark, "Two Cases of Poisoning with Illuminating Gas successfully treated by the Inhalation of Oxygen." "New York Med. Jour.," August 11, 1883. Loekey Stewart, "Brit. Med. Jour.," September 25, 1875, p. 392. Case of carbonic-oxide poisoning in which the inhalation of oxygen exerted no influence upon the patient's condition.

From the hour of her admission until she was bled—eleven hours—Lillie Bent's condition was growing gradually worse, and ultimately became so bad that her case seemed hopeless; this, in a moment, upon venesection, was transformed into one of apparently certain recovery.

The transfusion produced no appreciable effect, as might have been expected from the small amount of blood injected.

As additional proof of the value of bleeding in carbonic-oxide poisoning, I might allude to the case of her illicit companion, who, occupying the state-room with her, was likewise poisoned. Less seriously affected by the gas, he was venesected while convalescing. Maniacal and confined in a strait-jacket, he was bled about 512 c. c., and thereupon became so rational and docile that it was no longer necessary to restrain him.

To cite, as I might, other less serious cases in which the beneficial effect of blood-letting was less strikingly apparent would be superfluous.

Why, then, transfuse if venesection accomplishes so much? If for no other reason, to allow of repeated venesection. The poisoned individual should be bled freely, unless there be decided contra-indications, even after, to all appearances, out of danger, in the hope of diminishing the risk of pernicious after-effects.

Although bleeding of itself will probably suffice to save life in almost all cases which occur in practice, it has been demonstrated by Kühne (*l. c.*) that animals, poisoned beyond hope of rescue by venesection, can be saved by transfusion. In one of his experiments, where respiration had been suspended seven minutes, he was still able to restore life to the animal by the infusion of defibrinated blood.

Aside from experimental demonstrations of the value of transfusion in cases beyond recall by means of bleeding, nothing could be theoretically much more enticing than the plausibility of *substituting* blood corpuscles capable of taking up oxygen for such as are incapacitated from so doing by reason of the somewhat stable compound which carbonic-oxide forms with their hæmoglobin. Thus the much quoted and meritorious experiments of Panum* have led his partisans to believe in the possibility of blood *substitution* and to regard the blood corpuscles as something which can be taken from one individual and *transplanted* in another.

But von Ott† has shown the falsity of Panum's deductions, inasmuch as he could obtain like results, although making use of a fluid which contained no morphological elements.

Von Ott (*l. c.*) has demonstrated, furthermore, that blood corpuscles infused into the circulation are short lived, and that blood, whether entire or defibrinated, for other reasons, is not only no better than but not as good as a 0.06-per-cent. saline solution for transfusion in acute anæmia. One can not, therefore, properly speak of a substitution as transplantation of blood corpuscles by infusion of them into an impoverished circulation.

Fortunately, however, in carbonic-oxide poisoning it is merely necessary to sustain the patient artificially for a brief

period, and for this, undoubtedly, the infused corpuscles can serve as oxygen carriers for a sufficiently long time. For the circumstance, as von Ott's (*l. c.*) experiments teach us, that the infused corpuscles do not become integral constituents of the new organism, but rather are destined to a more or less rapid disintegration and elimination, does not prevent them from circulating and temporarily taking part in the interchange of gases. Clear, then, as are the indications for transfusion auxiliary to venesection in the treatment of the cases under consideration, the extreme difficulty of obtaining blood at all, to say nothing of sufficient quantity, has, up to the present time, classified the operation with the rarer therapeutic procedures. And we might, indeed, in the treatment of these cases, content ourselves with blood-letting were it not that the practicability of *refusion* removes what has been, perhaps, the greatest obstacle to the performance of transfusion.

To the investigations of Hermann, Donders,* and Podolinski† I owe the conception of refunding the purified for the poisoned blood of the victim to carbonic-oxide poisoning. Hermann‡ calls attention to the fact that nitrogen monoxide can liberate the carbonic oxide of the carbon-oxy-hæmoglobin, and forms a stronger combination with hæmoglobin than carbonic oxide does; and, subsequently, Donders (*l. c.*), Hermann, and Podolinski (*l. c.*) find that oxygen or air can, in a few minutes, free hæmoglobin from carbonic oxide if passed forcibly and in large quantities through the poisoned blood.

As to the best method of infusing fluids into the circulation, good authorities disagree. Of the four possible methods, centrifugally or centripetally into an artery or vein, the question of centrifugal venous infusion is entertained only to be discarded. Hueter, who gives to von Graefe the honor of being the first to draw attention to centrifugal arterial transfusion, deserves the credit of having introduced it to the profession, and strongly advocated the method.

Landois,* too, while contrasting, in general, arterial with venous transfusion, prefers, from a physiological standpoint, the arterial, be it centripetal or centrifugal.

Cohnheim,|| on the other hand, expresses himself decidedly against centrifugal arterial transfusion essentially as follows: One should surely under no circumstances inject peripherally into an artery; for the peripheral arterial branches contract with such energy against the foreign blood which is entering them that it is often necessary, in order to overcome the resistance, to exercise pressure sufficiently forcible to rupture the blood-vessels. The case is very different when one injects centripetally into an artery and employs no more pressure than is required to overcome the existing arterial tension. The blood infused mingles at once with that which is already present in the artery and flows, without resistance, into the first branch above, thence into its arterial and capillary ramifications, and from here on, under normal venous pressure, to the heart.

* "Archiv. f. Phys.," v, p. 24.

† *Ibid.*, vi, p. 553.

‡ "Arch. für Anat. und Phys.," 1869.

* "Die Transfusion des Blutes," Leipzig, 1875.

|| "Vorlesungen über allgemeine Pathologie," Bd. i, p. 424.

* "Archiv. f. path. Anat. u. Phys. u. f. klin. Med.," 1863.

† *Ibid.*, 1883, p. 114.

Kümmel,* Schede's assistant, produced gangrene of the hand by the centrifugal infusion of a saline solution into the radial artery, thus giving us a demonstration of a disaster which may attend this method, and which he might have foreseen.

We are, then, restricted to the choice between centripetal arterial and centripetal venous infusion.

Hüter's† arguments for peripheral or centrifugal arterial transfusion hold good for centripetal arterial infusion. He prefers the arterial to the venous transfusion, because the blood by the former method courses slower and more uniformly to the heart; because the minutest air-vesicle is retained in the capillaries; and because the danger of phlebitis is avoided.

Landois (*l. c.*) adds to these advantages another, viz.: that the capillary system, like a supplementary filter, catches all foreign particles which may be present.

The essential advantages of centripetal arterial transfusion in profound asphyxia, says Landois (*l. c.*), can be summed up as follows: 1. Arterial blood is thus most directly dispatched to the nerve-centers, in consequence of which the venous blood there contained is propelled onward into the veins; and 2. The filling of the arterial system rejuvenates the feeble circulation by creating a considerable difference in pressure between the arterial and venous systems.

Cohnheim (*l. c.*), too, from his experiments on animals, declares the central or centripetal arterial transfusion to be the least dangerous, and at the same time most completely effectual procedure.

From a practical standpoint, I am also impelled to advocate centripetal arterial infusion.

Besides the case already narrated, it has been my good fortune to transfuse by this method with most brilliant and unexpected success in two cases—one of acute anæmia and one of septicæmia.

Joseph Hart, aged eleven years, was admitted to Roosevelt Hospital, September 15, 1882, for a compound comminuted fracture of the tibia and some of the tarsal bones. The ankle joint was involved in the injury, and the soft parts were badly mangled. The wheel of a street-car had passed over his leg the night before. Patient is said to have lost much blood, and the cloths in which his leg was wrapped furnished evidence to that effect. The parents would not consent to an amputation, and the boy, although perfectly conscious and able to give an account of himself, was not in condition for it.

At 8.30 p. m.—eleven or twelve hours after admission—the patient was cold and unconscious, and his pulse was so rapid and feeble that it could not be counted satisfactorily. It was estimated to be about 180 per minute. I injected 192 c. c. of a salt solution (chloride of sodium 3 j; water, O. j) centripetally into the left radial artery, whereupon the pulse became quite full, and 135 a minute. The boy regained consciousness immediately, and his condition seemed to warrant an attempt at amputation—permission to do so having, meanwhile, been obtained. The administration of ether had such a bad effect on the pulse that the operation was deferred, and the leg placed in a hot-water bath. The patient continued to improve, and survived an amputation

of the leg, performed by Dr. Sands, twenty-five days after admission.

On the 18th of March, 1883, at Ward's Island, I infused defibrinated blood centripetally into the radial artery, in a case of septicæmia.

The patient, an Italian, about forty years of age, had suffered for several months from a suppurative disease of the ankle and some of the tarsal joints. For about one week prior to the operation he had, almost daily, well-pronounced rigors and a temperature ranging from about 36.1° C. (97° F.) to 40.6° C. (105° F.). He was so feeble that to amputate was deemed inadvisable even as a last resort. A depletory transfusion was accordingly undertaken. A stout philanthropic German offered to furnish the blood. So plentiful was his subcutaneous fat that not a vein could be seen, although his arm had been carefully constricted below the point at which the basilic vein usually perforates the deep fascia. Dissection for a vein, prolonged until even the would-be donor appeared willing to have the search discontinued, failed to discover one. Thereupon the radial artery was exposed without difficulty, although our subject fainted as the incision was being made through the integument, and so necessitated the completion of the operation upon the floor. The Italian was next depleted through his right radial artery until the arterial tension was barely sufficient to throw a jet across the graduated jar, into which 178 c.c. had been allowed to flow.

Immediately thereupon 186 c.c. of defibrinated blood was infused centripetally into the artery. In a few moments the patient's pulse had fallen to 120, which was eight beats better to the minute than before the administration of ether. The leg was then amputated just below its middle. Patient's pulse 112–114, weak, but regular, and better than before the amputation.

Cardiac stimulants were, of course, freely administered. Slight post-transfusion rigor and a temperature of 38.8 C. On the following morning, March 19th, patient's pulse was 110, and temperature normal. Since then uninterrupted convalescence.

It is only just to add that I have once done centripetal arterial infusion, in a desperate case of pyæmia, where the fatal termination was probably precipitated by the operation.

If the infusion of defibrinated blood influenced the action of the heart unfavorably, it certainly was, in part, to be explained by the too heroic depletion which preceded it.

This unsuccessful attempt should not militate against the method of injecting the blood, but rather against the indication for so doing, or against the manner or extent of the depletion. The main argument of those who prefer centripetal venous to centripetal arterial infusion is that the former is the simpler. If it be true that the latter is, in any degree, the safer method, the simplicity of the former does not deserve to be considered. Furthermore, instead of being easier, I am sure that it is often more difficult to discover a vein than to expose the radial artery. It was, for instance, impossible to discover a vein in the stout German referred to in this paper. Jennings,* too, one of the more recent advocates of the intravenous method, without having practiced the arterial, had considerable difficulty in finding a vein in one instance, and others testify to the same experience. The dangers of intravenous

* "Centralblatt f. Chir.," 1882, No. 19.

† Langenbeck's "Archiv," Bd. xii.

* "Transfusion," p. 26. Baillière, Tindall & Cox, London, 1883.

infusion, such as the introduction of air and small clots, and the overpowering of the heart by a too rapid injection, may be, theoretically, easy to avoid, but, practically, death has frequently been brought about by one or more of these causes.

To the centripetal arterial infusion pertain, theoretically, none of the dangers which, practically, in the intravenous method, are far from always to be avoided. And, from a practical stand-point, my cases, which, I believe, are the first recorded, induce me to advocate the centripetal arterial method.

TONIC SPASM OF THE TRAPEZIUS MUSCLE OF MALARIAL (?) ORIGIN.*

By L. EMMETT HOLT, A. M., M. D., NEW YORK,

ATTENDING PHYSICIAN TO THE CHILDREN'S DEPARTMENT OF THE NORTH-WESTERN DISPENSARY.

JOSEPH R., eleven years of age, presented himself at my dispensary clinic on Monday, September 24, 1883. He stated that he had been as well as usual on the Saturday previous; went to bed all right, but awoke in the middle of the night and found his neck drawn to the right side, and so stiff that he could not move the head in any direction. There was no history of exposure, and no draught in the sleeping-room, the windows being all closed. He felt no pain whatever. The spasm had continued from that time until I saw him. The only change he had noticed was that he thought it was less marked on Sunday and Monday mornings than in the afternoons, as he had been able at those times to move the head slightly. The only pain he had experienced at any time was when attempts at movement of the head were made. The bowels were constipated. He thought no febrile movement had been present. On examination, quite a unique deformity was found. The right shoulder was elevated fully three inches higher than the left, and the head was drawn downward so as nearly to meet it, deviating fully 45° from the vertical. His clothing was removed with a good deal of difficulty. The anterior border of the trapezius stood out very prominently at the side of the neck, and its fibers were very tense and hard. The middle fibers were also rigid, while the lower ones did not seem to be at all affected. The right scapula was nearer to the spine than the left, and its inferior angle was more prominent. The spine presented a well-marked double curve to the left in the cervical region and to the right in the dorsal. The dorsal curve was the greater, and looked precisely like an old lateral curvature. Viewed in front, the head was seen to be slightly rotated to the left and the chin a little elevated. Neither of the sterno-mastoid muscles was prominent or rigid. The head was held absolutely fixed in this position; voluntary attempts to straighten it brought out the sterno-mastoid muscles prominently, but made no visible change in the deformity. Passive movements were alike without effect, and produced pain. There was no tenderness found along the spine, over the trapezius muscle, or anywhere about the shoulder.

The patient's general condition was quite good. He was fairly nourished, and perhaps a little anæmic. The

tongue was coated; buccal temperature 100.5° F.; spleen very much enlarged.

The acuteness of the invasion seemed to preclude the possibility of any bone disease. The absence of any history of exposure, and of all muscular tenderness and pain, was thought sufficient to exclude any rheumatic element from the case. The constipation, the splenic enlargement, the slight fever, suggested the possibility that malarial poisoning might be the cause, especially as he lived in a district well known to be malarial. At all events, this view was adopted as a working hypothesis, and a mercurial cathartic and cinchonidine were ordered.

I took him at once to a photographer, but failed to get a picture, as the day was a stormy one. I directed him then to take no cinchonidine until he had been photographed the following morning. He promised faithfully; but, failing, doubtless, to see the force of the injunction, took ten grains of cinchonidine that night, and twenty more the following morning, before the accompanying photographs were taken. Whether from the effect of the medicine or not, very marked improvement had in the mean time taken place. The deformity of the previous day is only feebly portrayed. It

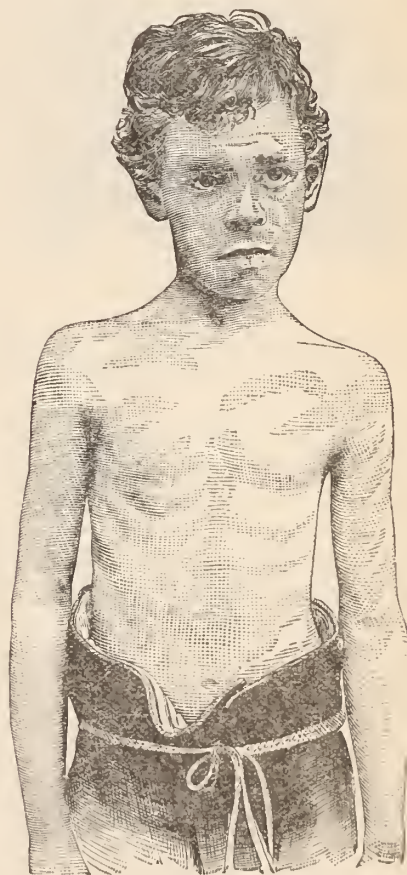


Fig. 1.

was the same in kind as that shown in the cuts, but much exaggerated in all particulars. Another circumstance which militated against us was the fact that the artist thought we wanted the photographs to show the result of treatment, and apologized for the picture, saying that he tried his best to make the boy stand straight, but that he would keep the right shoulder raised in spite of him, after he had gone to

* Presented at the New York Clinical Society, September 28, 1883.

him several times and pushed it down forcibly. I mention this fact as the prominence of the left sterno-mastoid, which

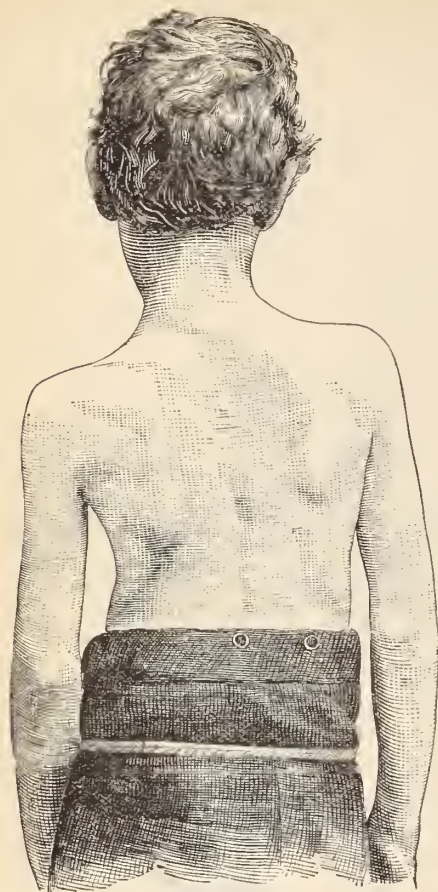


FIG. 2.

is shown in the cut, was not present when I saw the case, and is evidently caused by the attempt to hold the head erect.

I examined the boy that same afternoon and found that the rigidity had, in a great measure, disappeared. It required close inspection to detect any deformity. He took no more medicine; his symptoms did not return. I examined him critically four days later. No trace of the deformity existed. The spine was straight, and its movements, as those of the neck, were perfect.

I called at the house a month later and learned there had been no relapse.

Remarks.—The aetiology of these cases of tonic muscular spasm is a matter often of great obscurity, as nearly all authors on nervous diseases agree. The cases which develop gradually are more easily explained than those which come on suddenly, like the one reported. In the former, cervical bone disease, central brain and cord lesions are often found to be the cause. The latter are generally attributed to cold or to some reflex influence which may come from the teeth, the stomach, intestinal worms, uterus, etc. They are occasionally seen as sequelæ of the eruptive fevers, especially scarlatina. A few years ago Bohn published two cases which were referred to malarial poisoning. One was in a girl of five years, and accompanied the paroxysms of a tertian intermittent. The other was in a child

of two years, and was quotidian. Similar cases have also been mentioned by Steiner, Bouchaud, and Romberg. I have been unable to find that any have been recorded in this country except one that I myself reported in another connection.*

This was a case of spasm of the sterno-mastoid which left very little room for doubt in regard to its malarial origin. It occurred in a boy of eight years, who had had a well-marked malarial paroxysm, coming on every afternoon for two or three days, accompanied with torticollis. This disappeared during the night, and in the morning the neck was perfectly movable, and remained so until about two o'clock, when the symptoms came back as before. Two paroxysms were witnessed before any active treatment was begun, in order to settle the question of diagnosis. Quinine was then administered in full doses, with the effect of controlling completely both the torticollis and the constitutional symptoms. A little tenderness was present over the muscle in this case, but no pain except on attempts at movement. There was much splenic enlargement. The quinine was kept up for a few days after the symptoms subsided, and then stopped. The case was seen one month later, and no relapse had occurred.

In the case which forms the subject of this article I do not think the evidence sufficiently strong for one to say positively that the cause was malaria. That an obscure case is relieved promptly by quinine is by no means conclusive proof that it depended upon this poison, although this is an inference which is too often drawn.

To my mind it furnishes, in this instance, a very strong presumption, especially when taken in connection with the slight febrile movement and the marked splenic enlargement. A second point of interest in this case is its rarity. Tonic spasm of the sterno-mastoid is very common. It is not very infrequent to find a part of the trapezius also affected in cases of torticollis. A spasm of this latter muscle alone is, however, according to almost all the authors on nervous diseases, of exceedingly rare occurrence. The only picture of the deformity which I have been able to find is given by Ross, and taken from Duchenne. This shows a lateral deflection of the head, but the shoulder is not raised, and it conveys but a very imperfect idea of the affection.

200 WEST FIFTY-SECOND STREET.

FRENCH BRANDY.†

By ADOLPH W. MILLER, M. D., PH. D.,
PHILADELPHIA.

THE U. S. Pharmacopœia of 1880 has retained *Spiritus vini Gallici* as one of its officinal preparations. It is described there as an alcoholic liquid, obtained by the distillation of *fermented grapes*, and it is required that it must be at least four years old. An announcement recently made by the American consul at La Rochelle, in the wine-producing district of France, will no doubt sorely distress those who are

* "Am. Jour. of Obstet. and Dis. of Women and Children," April, 1883, "Malaria in Children."

† Read at the annual meeting of the Alumni Association of the Auxiliary Department of Medicine of the University of Pennsylvania.

disposed to follow the behests of our standard authority. This official document publicly proclaims the fact that French brandies are very generally falsified, and that large quantities of these sophisticated liquors are sent to this country. The term "brandy" seems to be no longer applied to a spirit produced by the fermentation of grapes, but to a complex mixture, the alcohol of which is derived from grain, potatoes, or, worst of all, from the refuse of the beet-sugar refineries.

It would seem to be fairly impossible at present to purchase a pure Cognac, as each individual proprietor of a vineyard has become a distiller and compounder. He has acquired the art of imitating any special flavor or vintage of brandy that may be called for. Potato spirits and beet alcohols, the most deleterious and obnoxious of all the varieties of spirits, are sent from Germany into France in vast quantities. They are flavored, colored, and branded or labeled to meet the wishes of American connoisseurs. The mere fact of coming out of bond or "straight through the custom-house" is generally accepted here as sufficient evidence that they are pure and genuine.

It is rather unfortunate that physicians themselves frequently strengthen this hallucination in favor of imported spirits by giving the most stringent orders to their patients to procure genuine French Cognac, even though it may command tenfold the price of an absolutely pure spirit of domestic production. This imperative command becomes a cruel injustice in the case of poor patients, whom it is perhaps necessary to support for months on alcohol. Under the best of circumstances, what is there to be gained by the use of French brandy in preference to *pure* domestic spirit?

The new pharmacopœia gives a comprehensive description of the physical properties of brandy, and enumerates a few tests which are intended to demonstrate whether it is of natural or factitious origin. We are advised that brandy contains from 46 to 55 per cent. by volume of alcohol, the remainder being nearly all water. When 100 c. c. are slowly evaporated, the last portions volatilized are to have an agreeable odor, free from harshness, showing the absence of fusel oil from grain or potato spirit. This "agreeable odor" is due to the fusel oils produced during the fermentation of wine, and consists of pelargonic, cœnanthic, butyric, acetic, and other ethers. The residue, when dried at 212° F., should not weigh more than one quarter of one per cent., showing the absence of an undue amount of solids. This substance should have no sweet, or distinctly spicy taste, thus proving that neither sugar, glycerin, nor spices have been added, though it is rather difficult to conceive what possible harm these may be productive of. The residue must be entirely soluble in water. Its solution is colored light-green by ferric chloride on account of the traces of oak tannin dissolved out of the staves composing the casks. As green tea and oak-bark are very generally used in flavoring artificial brandy, this color-change will not, however, serve to distinguish the one from the other. The pharmacopœia evidently permits the existence of a small proportion of acids in brandy, as it prescribes a proportion of caustic soda which is to produce a distinctly alkaline reaction.

It becomes evident from the foregoing that brandy is a very complex and indefinite compound, each specimen of which differs from every other not only in alcoholic strength, but also in the proportion of every one of its component parts. It seems, indeed, to be uniform only in the one fact of perpetual adulteration. As one of the chief objects of the pharmacopœia has been to secure accuracy and precision in the proportions of its compounds, it appears somewhat anomalous that the indefinite liquors—brandy and whisky—have not been expunged and replaced by a pure spirit of definite alcoholic strength. This becomes the more remarkable when an article of almost chemical purity can be so readily obtained at a mere fraction of the cost of the flavored liquors. The article known commercially as rectified spirit, French spirit, or sweet liquor, is produced by slowly percolating grain whisky, the so-called high-wines of the distillers, through large tanks containing granulated charcoal. Every particle of coloring and flavoring material, all the fusel oils, the amylic and other higher alcohols, are thus removed, and the spirit is thus rendered clean and sweet. The substance is in fact specially prepared for the art of compounding liquors, and, to accomplish this purpose successfully, it is essential that this basis must be absolutely devoid of any inherent flavor of its own, so as not to mar the bouquet of any of the cordials, wines, gins, brandies, etc., which are to be constructed out of it.

The medical authorities are unanimous in their condemnation of the various fusel oils, or higher alcohols produced during vinous fermentation. When these have been carefully removed from either brandy or wine, there remains simply pure 50 per cent. ethylic alcohol, entirely analogous to and identical with commercial sweet liquor. This substance, for which the title *spiritus maydis rectificatus* would seem to be appropriate, may therefore be regarded as a pure alcoholic stimulant, free from many of the objections which may be urged against other forms. It is to be regretted that this article has not been made official in the new pharmacopœia in place of the impure forms which have there found recognition.

Possibly it may not yet be generally known that the new pharmacopœia has given its official sanction to a flavored alcoholic cordial, the *elixir aurantii*. It was introduced as a substitute for the famous old Dutch liquor known as Curaçao. When this elixir was recently made by the first-course students in the pharmaceutical laboratory of the University of Pennsylvania, the official process was found to present no difficulties whatsoever. The resulting preparation proved to be highly aromatic and quite agreeable to even the most fastidious palate. Altogether, it is to be regarded as a desirable acquisition, both as an adjuvant or, *per se*, as an aromatic alcoholic stimulant.

HONORS TO SCIENTIFIC INVESTIGATORS.—The "Lancet" states that a Royal Society medal has been presented to Professor J. S. Burdon Sanderson, M. D., F. R. S., for the eminent services which he has rendered to physiology and pathology, especially for his investigation of the relations of micro-organisms to disease, and for his researches on the electric phenomena of plants. The same journal says that the Copley medal has been awarded to Sir William Thomson, F. R. S., for his discovery of the law of the universal dissipation of energy and his researches in physics.

THE
NEW YORK MEDICAL JOURNAL,
A Weekly Review of Medicine.

Published by
D. APPLETON & Co.

Edited by
FRANK P. FOSTER, M. D.

NEW YORK, SATURDAY, DEC. 8, 1883.

MEDICAL LEGISLATION IN VIRGINIA.

THE "Virginia Medical Monthly" very properly calls upon its readers within the limits of the State of Virginia to use their best endeavors to place certain proposed measures in their true light before the newly elected legislators. This, as we have urged upon the profession in New York, is almost the only way of securing an intelligent consideration of medical matters by members of a law-making body. When the session has once begun, as our contemporary remarks, their time is so taken up with political fencing that they have but little opportunity of looking into the merits of any measure regarding questions of which they can not pretend to much personal knowledge. Sanitation and the relations of practitioners of medicine to the community are subjects which, as a matter of course, they must study chiefly, if at all, with the aid of skilled testimony, and that should be all before them before they are called upon to act.

Virginia has had a State Board of Health for the past twelve years, but, by express provision in the act creating it, its members receive no remuneration, nor have they the control of any fund to draw upon for defraying the ordinary expenses incident to carrying out their decisions. If such a board is worth having, plainly it is worth paying for; and we can not suppose that the General Assembly created a board which it considered not to be worth having. Not only should a fund be voted on which the board could draw for the expenses of its work, but, in addition, the members of the board should receive a substantial recompense. We do not doubt that the present incumbents give their services cheerfully, or that they work heartily in the cause of sanitation without hope of reward; but we have had enough in this country of the miserable principle that medical services should be rendered to the State without a *quid pro quo*.

Another matter likely to come up before the Legislature is the proposition to establish a State board of medical examiners, a measure for which, it seems, the profession in Virginia has been petitioning for several years. The interests of inferior medical colleges and those of charlatans are all that can oppose such a provision, if it is drawn up with a fair amount of carefulness; and, in so conservative a State as Virginia, neither of these two interests ought to be very formidable. It must be that any real repugnance on the part of its legislators to enact a law establishing such a board has no more substantial foundation than a misapprehension that might easily be brushed away by individual effort put forth by the leading physicians of the State.

Our contemporary states that a number of other measures of practical interest to the medical profession are likely to be

brought before the Legislature, including a pharmacy bill. As we know nothing of the character of the proposed bill, we can only say that the fact of its emanating from the Virginia Pharmaceutical Association is *prima facie* evidence of its merit.

TEACHERS OF MEDICINE AS STATE EXAMINERS.

MUCH of the good that a great many people hope for from the creation of State boards of medical examiners—and we have not concealed that we shared their expectation—is undoubtedly contingent on the constitution of such boards and on the way in which their work is carried out. When the first draft of the Erie County society's bill was under discussion at a meeting of that body last summer, the feeling seemed to prevail that teachers of medicine had better be excluded from the proposed board. There can be only one good reason for such a feeling, namely, that an examiner connected with a medical school would be exposed to the temptation to favor the graduates of that school, reserving his severity for others. This objection can be done away with at the start, for it is perfectly practicable to provide by the terms of the law that no applicant's individuality shall be known to any of his examiners until after the votes are all in.

Moreover, it can scarcely be questioned that material advantages would be gained by having the examinations conducted by persons accustomed to such work, that is, persons who are or have been engaged in teaching medicine. In this matter a hint may be taken from the experience of our Canadian neighbors. It seems that the license examination, as practiced in the Province of Quebec, is at present highly unsatisfactory, according to the "Canada Medical and Surgical Journal." The preliminary examination—that on which a man's fitness to begin the study of medicine is made to turn—is all that could be wished for. The curious anomaly is presented, however, of a license examination, conducted, as we understand, by the same board, for the purpose of satisfying the State of the applicant's proper preparation for actual practice, so hasty and superficial as to make it a matter of congratulation with the journal in question that most of the applicants have already received the university degree, so that ordinarily no great harm is done.

Now, if the profession in the State of New York expects anything from the establishment of a State board, and if the State itself expects anything from such a measure, it is, that a higher standard shall be set up and enforced than the State can have any guarantee is or will be enforced by the colleges in the present state of things. Few, we take it, look for any higher or more searching requirements than the best of our colleges now adhere to, but most of us would like to see some legislative action taken to restrain inefficient and unscrupulous colleges from conferring the license to practice with no other controlling provision than their own sense of propriety or their feeling of what is for their interest as corporations.

It may well be doubted if the examinations that are insisted upon by our leading colleges, not only in this State, but elsewhere, are not considerably in advance of any that would be likely to be carried on by men chosen to the exclusion of college

professors. This doubt argues no conviction that great learning, or learning sufficient for the purpose, is by any means confined to the professors; it simply implies the plausible assumption that learning is not all that is requisite in an examiner. He should have an ever-present sense of what a young graduate may reasonably be expected to know, and of what he can not fairly be supposed to know; and, further, he should be able to ascertain precisely how much of the former he really does know, and that, too, without worrying him unnecessarily or consuming an undue amount of time in applying the tests. The experience of college professors leads them to just this discrimination and skill, and, while these acquirements may not be confined to them alone, the probability of their possessing them seems so great that their formal exclusion from an examining board would unquestionably be detrimental to the board's efficiency.

CONSUMPTION AS A PREVENTABLE DISEASE.

It can scarcely be said that the subject of the prevention of infectious diseases has not been accorded a prominent place in the discussions at medical gatherings, or in the periodical literature of medicine, for a number of years past. But, assuredly, this prominence is justified by the magnitude of the interests involved. It is not our present intention to raise any new questions bearing upon the matter, but simply to call attention to a very careful and satisfactory presentment that was lately made of it, at a meeting of the Medical Society of the County of Albany, by Dr. F. C. Curtis. Dr. Curtis's association with the work of the State Board of Health has led him to make the subject more of a study than perhaps it would have been practicable for him to do in the capacity of a practitioner simply.

On the occasion in question Dr. Curtis first alluded to some of the generalities of preventive medicine, and then proceeded to discuss the causes, and the consequent means of prevention, of small-pox, scarlet fever, diphtheria, pulmonary consumption, and typhoid fever. Much interest attaches to his remarks under each of these heads, but, as we have not space to allude to more than one of the affections mentioned with any approach to the degree of fullness warranted by the character of what was said, we must dismiss the others with the simple note that Dr. Curtis gave unreserved expression to his belief in the contagiousness of diphtheria, an attribute of the disease which some investigators are quite positive in denying.

It is of Dr. Curtis's remarks on the causes of consumption that we shall try to give a tolerably full summary, as the subject is one about which a good deal of uncertainty is felt in the profession at present. This unsettled state of opinion Dr. Curtis contrasted with the satisfaction with which Louis's conclusions were accepted some years ago. He thought it safe to say that the facts were not all in yet, and that, until they were, it was just as well to maintain an attitude of doubt with regard to the diathesis theory, the inflammation theory, and the specific-germ theory. Coinciding in a general way with Dr. Bowditch's opinion that most cases of consumption arose from local causes—"damp grounds, wet cellars, and sloughs and undrained prem-

ises, as well as want of sunlight and good food"—Dr. Curtis would add to these the inhalation of air contaminated with sewer-gas and decomposing organic matter. Even granting that there was a specific germ, it was considered certain that under the influence of these factors the disease flourished most readily, and a specific germ could not, therefore, be taken as its only cause. There were other environments, favoring lowered vitality, which operated in like manner. An interesting statement was quoted from the "Popular Science Monthly," to the effect that among animals in the wild state consumption was much more prevalent than among those in captivity, the writer attributing the fact to exposure and to the impossibility of the beasts' escaping in their lairs from the effects of violent storms. The danger to a delicate person, inheriting pulmonary weakness, of contracting the disease was much enhanced, Dr. Curtis continued, by the presence of air contaminated from a sewer.

In looking to the proper condition of a house in which a consumptive was to spend the winter, he would look to the drains and the cleanliness of the cellar and the living-rooms before he would consider dampness and want of sunlight, as suggested by Dr. Bowditch. In so far as these unhygienic surroundings admitted of remedy, consumption was preventable.

NEUROLOGICAL WORK IN AMERICA.

NEUROLOGY and psychiatry must undoubtedly be classed among the special departments of medicine in which the best work has been done in this country of late years. The New York Neurological Society has probably been one of the most active agencies in promoting this state of things, including as it does in its membership a number of gentlemen whose individual contributions have aided materially in bringing the study of nervous diseases to its present promising condition. The influence of the American Neurological Association, too, has been plainly felt in the same direction, notwithstanding the fact of its meetings being held but once a year.

The American literature of the subject has also been of great assistance in furthering the advance of neurology. The number of treatises and monographs that have appeared among us within a few years past and their creditable character have been remarkable. The works of Dr. Hammond, Dr. Hamilton, Dr. Mitchell, and Dr. Spitzka are such as must command attention wherever neurology is studied. The periodical literature of the specialty, too, is of a most substantial and gratifying character. It is certainly not a little remarkable that four great quarterly journals of neurology and psychiatry should be so well maintained as they are. The veteran "American Journal of Insanity," although its scope is limited, as its title implies, to one of the divisions of neurology, is a publication which must be valued chiefly as freeing our lunatic asylums from the reproach of doing nothing for the advancement of medical science commensurate with the field they afford for investigation. The "Journal of Nervous and Mental Disease" naturally suggests itself next, in the order of seniority. Its high character ever since its establishment, a number of years ago, is so well known to the profession that little more need be said of it than that its

present editor, Dr. Morton, has amply demonstrated the practicability of sustaining and heightening its excellence.

The "Alienist and Neurologist" is another publication of which the success seems now to be assured, as its merit has been obvious from its start. The editor, Dr. Hughes, of St. Louis, had unusual difficulties to contend with in establishing his journal, mainly in the form of ungenerous criticism at the outset. We remember an ill-natured remark made by a writer in one of the journals, in the course of a notice of the first number, to the effect that the appearance of the second number was doubtful. Nevertheless, the "Alienist and Neurologist" has now been published regularly for several years, and the quality of its matter has been such that we must congratulate Dr. Hughes on the successful accomplishment of his task.

The "American Journal of Neurology and Psychiatry," edited by Dr. McBride and Dr. Spitzka, although the youngest of the four quarterlies to which reference has been made, succeeded in its first number in winning the respect of the profession, and it has gone on steadily increasing its influence. It is remarkable, in particular, for the critical ability displayed in its abstracts, but in all its departments it shows a degree of worth that makes it a solid addition to the literature of the branches with which it deals.

With these facilities, it seems not too much to hope for, that American study in neurology and psychiatry may result, within the next few years, in many substantial advances.

MINOR PARAGRAPHS.

THE PRESIDENT'S MESSAGE.

This document refers to some matters of interest from a medical point of view. One of them is trichiniasis. After noting the repeal of French legislation prohibiting the importation of "hog products" from the United States, and remarking that the repeal is owing in great measure to the growing conviction in France that the prohibition was not demanded by any real danger to health, the President adds that Germany still continues to prohibit the importation of American pork, and that the Imperial Government declined his invitation to send representatives to this country to inquire into the alleged dangerous qualities of our pork. Nevertheless, an American commission has been appointed by the President to investigate the matter, in order, as the message states, "that the exact facts should be ascertained and promulgated." Some such action as this ought to have been taken long ago, and there can be little doubt that it would have contributed more than anything else to disabuse Europeans of any erroneous ideas they may have entertained as to the prevalence of trichiniasis in the United States.

THE SANITARY CONDITION OF THE PUBLIC SCHOOLS.

ATTENTION having lately been called to the wretched sanitary condition of some of the public schools of New York, an inspection has been made under the direction of the Board of Health, and on Tuesday the Sanitary Superintendent made a report to the board. Out of courtesy to the Board of Education, it is said, the president of the Board of Health refuses to make known the matter of the report. This action we can not but regard as unwise. It is the right of every citizen to know whether or not the public schools are in such a state as to en-

danger the pupils' health. Moreover, on general principles, it is better that the community should know the worst about such a matter, and without delay. Otherwise, the imagination is sure to magnify whatever there may be wrong. Surely these considerations are of more consequence than the requirements of courtesy between the two boards.

A MARINE HOSPITAL FOR NEW YORK.

It is getting to be more and more imperative that New York, the most considerable port of the country, should have a permanent marine hospital. Various temporary devices have been resorted to for many years past to provide hospital treatment for seamen entering the port, the last one being a two years' lease of the Seamen's Retreat, on Staten Island. Surgeon-General Hamilton considers this property the most suitable for the purpose of any that is to be had in the neighborhood of New York, and advises its purchase by the Government—a recommendation in which the Secretary of the Treasury concurs. It is certainly to be hoped that Congress will take action in the matter without delay.

MEDICAL ATTENDANCE ON JURYMEN.

HAVING provided the most approved rules for insuring the selection of jurymen of phenomenal stupidity, the law takes every precaution against their enlightenment, even by accident. So dear is this way of doing things to the legal mind that a judge's ire was lately roused in Philadelphia by the fact that a physician was called, without permission from the bench, to attend a sick jurymen. Conversation actually took place between the doctor and the patient, which, of course, must have impeded the course of justice!

NEWS ITEMS.

INFECTIOUS DISEASES IN NEW YORK.—We are indebted to the Sanitary Bureau of the Health Department for the following statement of cases and deaths reported during the two weeks ending December 4, 1883:

DISEASES.	Week ending Nov. 27.		Week ending Dec. 4.	
	Cases.	Deaths.	Cases.	Deaths.
Typhoid Fever.....	33	12	24	12
Scarlet Fever.....	64	7	46	7
Cerebro-spinal meningitis....	2	2	4	4
Measles.....	36	4	46	7
Diphtheria.....	37	16	50	16

THE QUARANTINE ON THE MEXICAN FRONTIER was raised on the 15th of November, and Surgeon Main reports to the Surgeon-General of the Marine-Hospital Service, from Brownsville, Texas, that for fifteen days before that date the quarantine had been merely one of observation, yellow fever having ceased to be epidemic.

THE QUARANTINE OF CATTLE.—In his annual message to Congress, the President says: "The appropriations, under which this department has established regulations for the quarantine of imported neat-cattle, are limited in their use to the prevention of the disease known as pleuro-pneumonia, or lung plague. Quarantine stations have been established for the ports of Portland, Me., Boston, New York city, and Baltimore. Suitable accommodations in sheds and yards have been provided for about 215 full-grown cattle at Portland, 700 at Boston, 450 at New York, and 550 at Baltimore.

"The importations for the current year have been much larger than were expected from the importations of former years. More than 1,100 head were at one time quarantined at the port of Boston, and the importations at Baltimore have

been about 900 head, which exceed the importations of the previous six years combined. It is believed that the accommodations at the ports named are sufficient for any demand that is likely to occur during the next year.

"It is deemed essential to the protection of our herds and flocks from infection with the 'foot and mouth' disease, that authority be conferred upon the department to enforce a quarantine against sheep, swine, and goats also, as this disease is as liable to be communicated by them as by neat-cattle. There is no law authorizing the quarantining of any animals except neat-cattle. In one case, at least, the foot and mouth disease was brought in, but, the quarantine system detecting it, its spread was effectually prevented.

"It is believed that the knowledge that our Government is enforcing a rigid quarantine, to prevent the importation of contagious diseases from abroad, is already exercising a salutary effect upon public opinion in Great Britain. Perseverance in it is likely to induce Great Britain to rescind her order for immediate slaughter of cattle exported thither from the United States, which is a hindrance to our exporters.

"The efforts of the Cattle Commission during the past year have been mainly directed toward perfecting the details of our quarantine system and ascertaining, as far as possible, the precise localities in which pleuro-pneumonia has existed, and enlisting the co-operation of the several State authorities in preventive measures. Under existing laws this is a task. It is difficult for one State to effectually rid its borders of this disease so long as the transportation of cattle from another State, infected, to any place at will is permitted.

"It is advised by the Cattle Commission, one of whom has investigated the subject in Great Britain during the past summer, that provision be made for the previous domestic inspection of cattle exported from the United States to that country, and that proper regulations be provided for the kind and healthful accommodation of them on their voyage. It would be well for that inspection to be made in co-operation by officers of our Government and agents of the British Government, and at the port of departure just before shipment. If Great Britain will join in this, a certificate of health from such a board will give confidence abroad, and tend to a profitable solution of pending difficulties. Legislation for this purpose may be deemed necessary. A detailed report of the work of the Cattle Commission will be submitted to Congress early in the session."

CONCERTED ACTION BY STATE BOARDS OF HEALTH.—A meeting of representatives of State boards was held at Detroit during the recent meeting of the American Public Health Association, at which it was decided to call a meeting of the secretaries or other representatives of all State boards of health, in Washington, during May, 1884, for purposes of conference, and with the view of organizing a section devoted to State board work in the present association, or the formation of a permanent separate organization specially adapted to the needs of State boards of health. Dr. Henry B. Baker, of Michigan, and Dr. J. N. McCormack, of Kentucky, were appointed a committee to confer with and secure the co-operation of all the State boards in fulfilling the object of the meeting, and Dr. C. W. Chamberlain, of Connecticut, Dr. J. E. Reeves, of West Virginia, and Dr. Stephen Smith, of New York, were appointed a committee on organization, to report at the meeting in May. The American Medical Association meets in Washington in May; and another reason for holding the meeting in Washington is said to be that the representatives of the State boards may also have an opportunity of conferring with the senators and representatives in Congress, from their respective States, in regard to national sanitary legislation.

THE AMERICAN PUBLIC HEALTH ASSOCIATION.—In the report of the recent annual meeting, given in our last issue, it was erroneously stated that Dr. William Brodie was the treasurer. Dr. Brodie informs us that Dr. J. Berrien Lindsley really held the office.

THE "CHRISTIAN HEALER."—This Brooklyn charlatan, Francis W. Monk by name, has been sued for a sum due for services by his "secretary," and the jury has found for the plaintiff in the sum of \$300.

Proceedings of Societies.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

AN adjourned meeting was held November 25, 1883, Dr. DAVID WEBSTER, President, in the chair.

THE REPORT OF THE COMMITTEE ON HYGIENE, which consisted of four parts, was read by the Secretary, Dr. W. M. CARPENTER.

The first part, by Dr. E. G. JANEWAY, related to the work of the Board of Health in preventing the spread of contagious diseases. Statistics were given of the mortality from typhoid, typhus, and scarlet fevers, measles, small-pox, and other contagious diseases, for the past quarter of a century, going to show that by the efforts of the Health Board the percentage had been considerably lessened during the latter part of the period. The work of the vaccinating corps was specially worthy of commendation and support.

The second part, by Dr. O. D. POMEROY, referred to the influence of draughts of air, cold, sea-bathing, cold water, concussion, noise, monotonous and discordant sounds, blows, pulling on the auricles, sunstroke, etc., in the production of ear diseases.

The third part, by Dr. STEPHEN SMITH, referred to the injurious influence of sewer-gas, and called attention to the great amount escaping from the "man-holes" in the streets. The method in use was practically the conducting of the sewage along the open streets, and it so filled the atmosphere with gases that in damp weather it was necessary to close the windows of our dwellings to shut out the odor. The only effectual way of ventilating sewers was by conducting the gases into the upper atmosphere, on the principle of aspiration.

The fourth part, by Dr. S. O. VAN DER POEL, pointed out the objectionable features of high houses from a hygienic point of view. They were particularly liable to aid in the spread of contagious diseases through the ventilating shafts and through the pipes, and by not allowing of isolation. They also cut off sunshine from the street and from the houses adjoining or opposite, as well as from the lower stories of the same building. The upper floors could not be reached by the Fire Department.

The retiring president, Dr. DAVID WEBSTER, then read his address, after which the regular meeting was called to order by the new president, Dr. S. O. VAN DER POEL.

CEREBRAL EXHAUSTION.—Dr. J. LEONARD CORNING read a paper in which he spoke of cerebral exhaustion as a protoplasmic disease, giving rise to certain morbid mental phenomena, such as restlessness during the day, wakefulness at night, pains at the vertex and above the ciliary arches, derangement of memory, morbid feelings, desires, and appetites, volitional impairment, etc. There were often certain vaso-motor disturbances. As to the causation, Dr. Corning referred to the sharp divisions of labor of modern life, requiring undue concentration of thought and action and extreme mental effort,

accompanied by the exhaustion of sexual indulgence and other evil habits. He regarded the essential pathology as one of inefficient nutrition of nerve-cells. The object of treatment was to replenish the exhausted nerve elements by rest, sedatives, and nourishment. There were no specifics. Rest was to be obtained by an increased amount of sleep, even to fifteen hours out of the twenty-four, and by bromides, but only as a temporary expedient. Tonics might be of service, among others the fluid extract of coca. The most difficult cases to treat were those in which there was dyspepsia. During waking hours the patient should, if possible, be engaged in some light occupation, in amusements, or labor which required but little mental effort.

Dr. L. PUTZEL opened the discussion. There were several points in the paper with which he could not agree. First, the author spoke of circulatory disturbances in cerebral exhaustion. This was a favorite doctrine with some, but he had failed to find the proof of it. For instance, a patient went to certain specialists, who stated that he was suffering from cerebral hyperæmia. He went to another, equally noted in his specialty, who said that he was suffering from cerebral anæmia. Dr. Putzel had been unable, post mortem, to verify the diagnosis of cerebral hyperæmia or anæmia in cases in which these conditions had been supposed to be present. Nor had it been established with the ophthalmoscope. Again, with regard to the use of bromide of sodium, a large dose might abate the symptoms for a while, but he had failed to see a case in which its continued use had not aggravated the symptoms. He regarded these cases as due to one of three causes: First, hereditary tendency to nervous disease, manifested differently in different individuals. Second, worry. He doubted whether work, or even over-work, would alone produce cerebral anæmia, unless worry was added. Third, anæmia. Besides rest, tonic treatment was important, and he had produced the greatest benefit with arsenic. He had failed with phosphorus.

Dr. DAVID WEBSTER said that he had been unable to persuade himself that patients suffering from cerebral exhaustion presented any peculiar appearance of the retina. He would suggest that, instead of placing the patient in a dark room during the hours of sleep, he should wear something over the eyes to exclude the light, and occupy a chamber in which the sun's rays could enter.

Dr. D. B. ST. JOHN ROOSA had not been able to discover anything peculiar in the circulation of the retina in cerebral anæmia. He thought that, if it existed, it would be more likely to be manifested in the lateral vessels of the optic papilla.

Dr. A. JACOBI spoke of the subject from the point of view of a general practitioner, and said that cerebral exhaustion was not very well understood, perhaps because the brain itself was not yet very well understood. The cerebral circulation was affected largely by the condition of the other organs of the body, and its inefficiency might be due to disease of those organs. The treatment, of course, would depend upon the circumstances attending the individual case. Often it had to be directed to the heart, to the lungs, or other organs, rather than to the brain itself. But cerebral exhaustion might result from mental over-work alone. He did not refer to actual disease of the brain, as this was not mentioned by the author. It had sometimes happened, however, that we treated symptoms supposed only to be functional, when they were afterward found to be due to an actual lesion. He instanced polio-myelitis. Julius Althaus, of London, professed to cure every case of brain exhaustion by a few applications of the galvanic current. While this was a beneficial agent, Dr. Jacobi said that he could not accomplish such results with it in so short a time. So far as the condition of the retinal vessels was concerned, he did not think that it was any more important as an indication of cerebral

anæmia or hyperæmia than the condition of the blood-vessels of the neck, nor did he think the post-mortem condition would indicate whether anæmia or hyperæmia had been present during life. He agreed with Dr. Putzel, that there was no better nervine than arsenic. He had employed it for more than twenty years, and his opinion with regard to its efficacy had grown more and more favorable. It should be given in small doses and for some time. Where the heart was also at fault, digitalis could be given with advantage.

Dr. ANDREW H. SMITH had often been struck by the faulty distribution of the blood in cases of cerebral exhaustion; one moment the hands were warm and the next cold, and so of the feet and other parts. Special attention should be given in such cases to equalizing the circulation, and digitalis, among other drugs, had proved of benefit.

Dr. E. C. HARWOOD had found a change of climate do more good than drugs, and mentioned Switzerland and Vermont.

NEW YORK SURGICAL SOCIETY.

Meeting of November 13, 1883.

(Concluded from page 612.)

EXCISION OF THE WRIST JOINT.—Dr. H. B. SANDS presented a patient upon whom he had recently performed excision of the wrist joint. He was a Swiss, forty-three years of age, and a waiter by occupation, who came under Dr. Sands's notice in the early part of last summer, having suffered for nearly a year with symptoms of strumous arthritis of the wrist, the disease having gone on to softening and destruction of the joint, without the formation of abscess. He was treated by immobilizing the joint, but without benefit. The wrist being considerably swollen, and very painful and tender, Dr. Sands decided to perform excision, which he did on the 31st of July, according to von Langenbeck's method, by making a single incision upon the dorsum of the hand and wrist. It was found that the disease involved a great extent of the synovial membrane, which had to be almost entirely cut away. The ulna and radius were separated, so that they could be moved upon each other with crepitus, and before the operation the bones were softened, the first row was removed by ordinary dissection, and the other bones were removed with a sharp spoon, the trapezium, however, and also the pisiform bone being left. The extremities of the ulna and radius were removed, and the bases of all the metacarpal bones except that of the thumb. A bone drain was inserted, peat dressing applied, and the arm was suspended. When the first dressing was removed, at the end of twenty-three days, the deep part of the wound was found entirely closed, and there remained only a superficial ulcer, which closed at the end of a few weeks. During the operation the radial artery was divided, but no harm came from the accident. The hand was now beginning to become useful, and the patient had the power of extension and flexion of the fingers to a considerable extent. He could flex the first phalanges with the metacarpal bones at nearly a right angle. Apposition of the index finger with the thumb was easy, the extension of the latter being limited, in consequence of adhesion of the long extensor tendon to its sheath. The man was free from pain, and was able to move his hand and to grasp objects with considerable firmness. Passive motion was resorted to after removal of the dressing, and had been kept up steadily since. The operation was tedious, but Dr. Sands believed that von Langenbeck's method of excision would be found preferable to that recommended by Lister, in which lateral incisions were practiced.

Dr. STIMSON remarked that he performed excision of the wrist last summer by the same incision, and found, as Dr. Sands

had mentioned, that the removal of the bones was very easily effected.

Dr. SANDS said he omitted to state that the power of the hand was very much increased when circular compression was made around the wrist.

ANEURYSM BY ANASTOMOSIS OF THE FACE AND ORBIT; ELECTROLYSIS; LIGATURE OF THE COMMON CAROTID ARTERY.—The PRESIDENT related the case of a patient whom he saw first with Dr. Damainville, who had kindly furnished the following history:

Emilie C., aged forty-three, a widow, a native of France, was born with a naevus on the right cheek, near the eye, which, although quite large, did not seem to grow or pulsate until after her first confinement, fifteen years ago. Then it began to grow steadily, extending toward the lip, but giving her no pain.

Seven years ago a Dr. Goodridge, or Goodrich (the patient remembers neither the name nor the address of the doctor), probably tied the right superior coronary artery, so far as can be made out from her vague description. Shortly after the operation, whatever it was, the aneurysm began to extend upward toward the eye. She did nothing for it, as it gave her no pain, until some time in January, 1883, when, having accidentally struck her head against a bed-post, the tumor began to pain her and to increase in size.

On February 7, 1883, she came to the French Hospital for treatment. At the time of her admission her condition was as follows: A tumor extended from the orbit and lid to the lip, elevating the skin to the extent of two inches or more, pulsations being very strong and easily seen from a considerable distance. All the blood-vessels on that side of the face were enlarged. The mucous membrane of the mouth and gums was so vascular that it bled on the slightest provocation. She complained of a sense of fullness and throbbing in the eye and lip, and said that her vision had never been so good with that eye as with the other. On introducing the finger into the mouth, the pulsations were felt to be very strong and violent.

On February 17, Dr. Charles Bliss, of No. 235 West Fifty-first Street, performed electrolysis by means of a zinc-carbon battery. Eight cells were used, several needles being thrust in in various places. The application lasted twenty or twenty-five minutes. This operation was followed by quite an extensive slough at the upper part of the cheek, the wound healing by granulations and leaving a crucial cicatrix. No hæmorrhage ever took place during or after this operation. The pulsations were entirely suppressed where the sloughing occurred, and for some little distance around it, but nowhere else. The other parts of the tumor began to increase very much in size, the lower lid and the upper lip being very much swollen and throbbing violently, thus showing that the electrolysis was followed by beneficial results only where it produced sloughing, as stated above.

On April 21st, by the advice of Dr. F. H. Hamilton and Dr. T. M. Markoe, the right common carotid artery was tied above the omo-hyoid, the gut ligature being employed. Ether was administered. Only dry cotton was used as a dressing. Union by first intention occurred, the ligature being absorbed. No bad symptoms followed the operation, excepting a pain in the right arm and around the clavicle, which prevented her from raising her hand to her head for the purpose of combing her hair, which, after the operation, began to fall off profusely. Immediately after the operation all throbbing ceased in the tumor, except at the inner canthus near the mesial line, where a slight pulsation could be detected by the finger; but the improvement was steady and progressive, as could be judged from the diminished size of the face, the comparatively free motion of the lower lid, and the feelings of the patient in general.

On June 8th she was discharged from the hospital. Although the pain in the right arm had very much diminished, she still had some—enough to impede the motions of the limb. Pulsations in lid and lip suppressed, but quite perceptible at the inner canthus.

September 4th: She called to see me to-day. No pulsations are perceptible, except at the inner canthus. The angular artery seems to be enlarged. The pain in the right arm is entirely gone. She thinks her vision on that side is very much improved. Her hair has ceased

falling off. She says that, for the first time in a number of years, she can chew on that side of her mouth, and can brush her teeth without making the gums bleed. The cicatrix on the neck is very firm, slightly painful on pressure or when the weather is about to change. The cicatrix on the face, where electrolysis was performed, is hardly perceptible. She says she feels strong and has not been so well in years. In fact, the benefit resulting from the operation is greater than usual, and her present condition is as satisfactory as could be desired.

REFUSION IN CARBONIC-OXIDE POISONING.—Dr. WILLIAM S. HALSTED read a paper with this title. [See p. 625.]

Dr. R. F. WEIR remarked that last spring his attention was called to the frequency of coal-gas poisoning during the past few years, and also to the fact that most of the cases were due to gas made by the water process, in which carbonic-oxide existed in the proportion of about twenty-five to thirty per cent., whereas in ordinary coal-gas, made after the old method, it existed in the proportion of only two to six per cent. The danger, therefore, from leakage, unburnt gas, etc., in the use of water-gas, was apparently very great, and should be known more generally than it now was. Coal- or naphtha-gas was much safer.

TUBAL GESTATION, RUPTURE OF THE TUBE AT THE END OF THE SECOND MONTH; INTERNAL HÆMORRHAGE; ABDOMINAL SECTION; LIGATION OF THE TUBE; DEATH IN FORTY-SEVEN HOURS FROM SHOCK.—Dr. CHARLES K. BRIDGON presented a specimen accompanied by the following history: Mrs. K. I. K., aged twenty-eight, a short, stout brunette, measuring five feet and less than one inch, and weighing one hundred and fifty-five pounds, is the mother of two children, one three years, the other thirteen months old. She has always enjoyed good health. Her last normal menstruation occurred on the tenth day of August, 1883. Two months subsequently, on the tenth day of October, she had a flow of clotted blood accompanied by pain of an intermittent character. On the sixteenth day of the same month, while out walking, she was taken with sudden severe pain, and was obliged to sit down for some minutes. The pain continued with diminished severity until and after she reached home. When I saw her she was suffering considerably. The pain was pelvic, and did not appear to be more acute on one side than on the other; it was continuous, but aggravated at uncertain intervals by paroxysms of increased severity. She says that when the pain attacked her in the street she felt something flow from her vagina, but, on examining her linen, found it only soiled with a little mucus. She complained of being unable to urinate. There was no increase of temperature, no acceleration of pulse or respiration. On making an investigation, I found the os low and slightly displaced forward. It was soft, and dilated sufficiently to admit the first phalanx of the index-finger. The body of the uterus was exquisitely sensitive and enlarged. Though the physical conditions of retroversion were not present, I thought that the inability to urinate might be occasioned by some mechanical impediment. I emptied her bladder, and, placing her in the knee-elbow position, found that, on opening the vulva, the uterus receded and there was nothing at all to be felt in the cul-de-sac. Rest and a few doses of chlorodyne sufficed for treatment, and in a few days she was well.

In the afternoon of the 29th she was again attacked with pain, and, although there was no flow, I suspected that abortion was imminent, and prescribed an anodyne and rest. I received a second, urgent message to see her at 7 p.m., and I found her suffering with symptoms of internal hæmorrhage. She exclaimed that she was dying; her extremities were cool, her face was pallid, and I could detect no radial pulse. I had no hesitation in expressing the opinion that the case was one of tubal pregnancy, and that rupture had taken place; I explained the dangerous character of the condition to her husband, and

the probability that prompt action would have to be taken, and I requested counsel. Dr. H. F. Walker saw the case with me before nine o'clock, and suggested that we should call in Professor T. G. Thomas, who saw the patient at half-past nine. There was no division of opinion: all were agreed that an abdominal section and the institution of such means as would secure against the further escape of blood were the only ones calculated to afford even the slightest chance of recovery. The consent of the patient and her friends being obtained, the only delay was occasioned by the insistence on their part that she should receive the sacrament before the operation.

I was ably assisted by my friends Dr. Gerster, Dr. Walker, and Dr. Scharlau, and it affords me great pleasure to testify to the kindness and promptness with which they responded to my call for assistance under very trying circumstances. Ether was administered by Dr. Scharlau, and very little indeed was used. The corpulence of the patient made it necessary to make a long incision, reaching from the umbilicus to the pubes. Her collapsed condition rendered this almost a bloodless proceeding. When the peritonæum was exposed, a small incision was first made, which gave exit to a large amount of fluid blood. The incision was then enlarged sufficiently to admit the hand, and at least a pint of blood-clot was scooped out as rapidly as possible. The uterus was then drawn up, as far as its connections would permit, and the cause of trouble was at once apparent. Part of an ovum, one inch and a quarter in diameter, was found protruding from a rent in the left Fallopian tube close to its uterine extremity. The broad ligament was lifted as much as possible, and a probe, armed with a double stout plaited-silk ligature, was passed through it as low down as could be done, and the ends were firmly secured above the free border. In these manipulations the ovum was forced from its bed in the oviduct, and was removed entire. The hæmorrhage appeared to be entirely controlled, the ligatures were cut short, and the toilet was completed by thorough cleansing of the cavity. The wound was then closed by silver-wire sutures. No time was lost in completing the dressing, but the patient was removed at once to bed, surrounded with blankets and hot bottles. Her head was enveloped in a warm woolen shawl, a small hypodermic of morphine was administered, and brandy was used subcutaneously. It was not, however, until after midnight that an occasional flicker could be felt in the pulse at the wrist. Vomiting, which occurred, was treated by frequent sips of hot water. Nutrient and stimulant enemata were used all through the night. On the morning of the 30th her appearance was much improved. She was inclined to talk, was even cheerful, and expressed herself as entirely free from pain; she only complained of the vomiting; but, notwithstanding these favorable signs, her pulse could scarcely be felt, much less counted; at times it could not be distinguished at all. The temperature was 101° , the respiration 36. At 10 A. M. her pulse could be counted, and it was 126; after this it improved for twenty-four hours, averaging 130, the temperature for the same period being 101° to 102° . In spite of the most assiduous stimulation, the circulation could not be maintained; she began to sink on the afternoon of the 31st, and died at 9.30, forty-seven hours after the operation.

Secio Cadaveris.—October 31st, 11 P. M.—Abdomen only moderately distended. Abdominal wound agglutinated, but easily separated. Omentum adherent to the peritoneal surface in the neighborhood of the line of incision. No general diffuse peritonitis. About two ounces of odorless bloody fluid in the cavity of the pelvis. The left broad ligament adherent to the anterior wall of the rectum. Uterus enlarged to nearly twice its normal dimensions. At the junction of the left oviduct with the uterus, and encroaching upon the cornu itself, was an ovoid swelling about one inch in diameter, darker than the surround-

ing structures, of a mottled, violaceous maroon color. Near the junction of the posterior wall of the duct with this swelling was a ragged opening half an inch in length, and leading into a cavity formed mainly out of that portion of the duct that traverses the uterine wall, so that the specimen might be said to represent the variety known as interstitial, or, more correctly, tubo-interstitial gestation. On incising that portion of the cavity that was developed at the expense of the uterine textures, it was found filled with adherent coagulum. The cavity of the uterus was not lined with decidua, and the uterine opening of the oviduct was impervious. Outside the rent were found the ligatures applied during life, and which had effectually controlled the hæmorrhage.

Remarks.—About twenty years ago a surgeon of this city, the late Dr. Stephen Rogers, was a vigorous advocate for the performance of laparotomy in cases of internal hæmorrhage due to rupture of the oviduct; but the profession was not at that time prepared to accept the proposition. The great advances that have been made in abdominal surgery since then have paved the way, and, although I am not aware that the operation has been performed, I can state advisedly that the matter has been much debated, and that the views of Dr. Rogers are now generally approved. Grailly Hewitt says, in the last edition of his work on the "Pathology, Diagnosis, and Treatment of the Diseases of Women": "In cases of Fallopian pregnancy, if it were possible to make an exact diagnosis of these cases of rupture and hæmorrhage during life, it would undoubtedly be better to open the abdomen and endeavor to secure the bleeding vessels than to allow the patient to die of hæmorrhage. No operation of the kind has ever been attempted, but the subject has formed matter of discussion on more than one occasion at the meetings of the Obstetrical Society of London."

Lawson Tait, in his recent book "On the Diseases of the Ovaries," says: "I have very little doubt, however, that many of these cases would be saved by prompt action. The difficulty is, of course, in the diagnosis, some certainty of which is requisite before an abdominal section can be performed. I have twice been on the point of performing abdominal section on account of suspected rupture of a Fallopian tube, and have been prevented by scruples as to the correctness of the diagnosis. In both cases post-mortem abdominal section showed that the suspicion was correct, and I believe both of these patients might have been saved."

Other authorities might be quoted indorsing the opinions thus expressed, but I think these will suffice to show the general conclusions of those most familiar with the subject.

In the case that forms the basis of this communication the subject of transfusion was entertained and rejected. Previous to the operation I could only conceive that it would be harmful where we had to deal with concealed hæmorrhage, and there are such doubts as to its precise location and character as may render it questionable whether we are warranted in adding the shock of an operation to that already existing. The issue of the case will depend upon the success with which we can keep the circulation at a minimum consistent with life. If we resort to means which raise arterial tension, we shall interfere with those conservative processes which we imitate with more or less success in the application of hæmostatics, and certainly cause further leakage from partially occluded vessels. In this case, after the blood-supply was cut off by the application of ligatures, I had faith in the natural robustness of the patient, and, though she hovered between life and death for twenty-four hours, the condition of the pulse after that time, and up to within a few hours of death, justified the confidence I had placed in those resources. The heart failure, which occurred more than forty hours after the bleeding was arrested, I at-

tributed to shock, which I did not think could be beneficially influenced by transfusion, and, consequently, did not feel warranted in resorting to a means that I certainly do not regard as free from danger.

ANKYLOSIS OF THE KNEE IN A FLEXED POSITION; RESECTION; WIRING OF THE BONES TOGETHER IN A STRAIGHT POSITION; GANGRENE OF THE LEG AND FOOT; AMPUTATION OF THE THIGH; DEATH.—Dr. A. C. POST presented a specimen with the following history: A. P., a mulatto, aged thirty-eight. His left knee was ankylosed in a flexed position at an angle of sixty degrees. At the age of eleven years he cut his knee with an axe, and the ankylosis was the result of the inflammation which followed the injury. July 5, 1883, I operated on him by making a transverse incision over the greatest convexity of the knee, the incision dividing the integument over the anterior and lateral parts to the extent of three quarters of the circumference of the limb. Several small arteries were cut and tied. I then, with a saw, removed a large wedge-shaped segment of the bone, and afterward several smaller segments. I also divided the tendons of the biceps, semitendinosus, semimembranosus, gracilis, and sartorius, after which I was able to bring the bony surfaces in contact, in an extended position of the limb. Considerable resistance was offered by the popliteal nerve, which finally yielded without rupture. I then drilled four holes obliquely through each segment of the bone, through which I inserted flexible iron wires, which I twisted so as to keep the bones in position. After this I applied an iron splint along the posterior surface of the limb, and one on each lateral surface. The lateral splints were each bent at four right angles, so as to leave an open space on each side of the knee. Plaster-of-Paris bandages were then applied over the thigh and leg, holding the splints in position, but leaving a space of more than six inches over the knee uncovered, so as to give free access to the wound. The wound was washed with carbolic acid, 1 to 40; and the integuments were brought together with sutures, except at the posterior part, where a large open space was left for drainage. The parts about the wound were then covered with lint wet with carbolic acid, 1 to 40. The operation was completed at about 7 P. M. At about 11 P. M. I was summoned to the patient on account of hæmorrhage. I found that there had been considerable oozing of venous blood. I had the limb elevated, applied compresses over the wound, secured by a roller bandage, and suspended the limb to the ceiling, with the foot elevated about fifteen inches above the bed.

July 6th.—There has been no return of bleeding. The patient has been much more comfortable since the suspension of the limb. As his circulation was very languid, and he had been accustomed to the very free use of alcoholic drinks, I directed an ounce of whisky once in three hours, in the form of egg-nog, or of milk punch.

7th.—He has had frequent vomiting, and has scarcely retained anything in his stomach. A sinapism was directed to be applied over the epigastrium, and a scruple of calomel was administered, after which porter and lime-water were directed to be given, a half-ounce of each every hour. Rectal alimentation was ordered, with stimulants.

8th.—Vomiting has nearly ceased. His pulse has a little more force, but is still feeble. The integument about the heel has a livid appearance, but has not lost its sensibility. The lower flap of integument in front of the knee is quite livid, but the upper flap is of a good color.

9th.—The leg and foot are decidedly gangrenous. I amputated the thigh, about 11 A. M., above where the bone had been divided in the resection, leaving a large anterior flap.

10th.—The patient has not rallied well since the amputation. The pulse is feeble and the surface cold. He continued to sink,

and died in the afternoon. He had taken stimulants freely, but very little food.

The fatal result in this case was largely to be attributed to the previous habits of the patient.

TUBERCULAR ORCHITIS.—Dr. A. G. GERSTER presented a specimen with the following history: It was a testicle removed from a man forty-one years of age, and was the seat of tubercular orchitis. The diagnosis was made before any fistula formed, from the fact that an acute orchitis, which resulted from injury, had never completely subsided. The patient, two or three weeks before Dr. Gerster saw him, had chills and night sweats, and the spermatic cord became infiltrated and indurated close up to the internal ring. Castration was performed, and the patient did well. When the tunica vaginalis was opened, the tissues presented an appearance similar to that seen in a fungous condition of the joints, but the center of the testicle contained a large tubercular focus.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Meeting of November 21, 1883.

FURTHER NOTES ON THE USE OF HAMAMELIS IN THE TREATMENT OF VARICOSE VEINS.—Dr. J. H. MUSSER read the following paper: Some time ago the writer called the attention of the profession to the use of hamamelis in the treatment of varicose veins and their sequences.* Since then numerous inquiries have been made of him concerning this drug, and several cases have been reported to him of its use. It has, therefore, been deemed advisable to again refer to this plan of treatment in order to instigate further investigation by the profession, so that the exact value of the drug in this disease may be determined. In the first place, to determine this question, it is important to know whether the beneficial results of the treatment of the cases previously reported were permanent or not.

The three cases noted in full in this paper have been under my observation ever since that time. The first two may be dismissed at once by saying neither of the patients has had any return of the varicose veins or of any symptoms of them. Regarding the third, who was to be present to-night, it will be remembered that, on account of the severity of his symptoms, he was unable to work for nine months prior to having taken the medicine, and for three months of that time he was treated in a hospital by rest, pressure, etc. He returned to work two months after beginning the hamamelis, and has continued at his laborious occupation ever since. In answer to a summons, he presented himself two weeks ago. He had not taken any medicine for ten months. There was no return of any one symptom of his disease, save the varicosity noted below and slight œdema of the left leg. The tissues, however, readily take on ulcerative action, for every time a stone fell against his leg an ulcer formed, with this difference from formerly, that it healed rapidly. On examination, two inches below the knee, on the inner aspect of the leg, a congeries of veins is found. They are not painful, returned during the past month, and have given him no trouble. The œdema of the ankle is not marked. There is a small healing ulcer on the right leg, which was caused by a stone falling on the leg a month ago. Both extremities are very cold, on account of which he wears heavy stockings and woolen material—articles that were unbearable one year ago. When the past sufferings of this man are compared with the comfort and usefulness of the past year, in view of the previous systematic treatment of him, it can scarcely be gainsaid that hamamelis is of value in varicose disease. The writer takes pleasure in referring to his friend, Dr. Judd, who has been familiar with the

* "Phila. Med. Times," April 21, 1883.

case, past and present, and will substantiate the statements regarding him.

The subsequent experience of the writer has not been a large one, and only two patients can be referred to positively. Others were treated, but did not report for inspection after the second or third visit. Of the two, one was much benefited; the other not relieved. There is no sufficient cause for the failure of the drug in the last case. But, in order not to present the facts alone of a probably prepossessed observer, the statements of numerous gentlemen will be given who have made use of the drug since the article referred to was published. It is, no doubt, natural that only the favorable cases have been reported to the writer—failures not being considered worthy of notice. There are some unfavorable comments given, however, and they will be first noticed.

Thus Dr. Dulles, surgeon to the dispensary of the University Hospital, writes as follows: "I tried it in a number of cases of leg-ulcer in the dispensary, and finally abandoned its use, because I came to the conclusion that it was only of moderate value, and could in no sense be looked upon as a substitute for the ordinary surgical methods of treating these ulcers."

Rather more favorable is the testimony of Dr. Stelwagon, chief of the Skin Dispensary of the same hospital. He says: "The remedy was made use of in about fifteen cases—in patients with eczema, ulcers, or both, in whom the veins were at all enlarged. In three instances the results seemed, both to the patients and myself, favorable. In four or five cases the patients thought some benefit had ensued; I could not convince myself that such was really the fact. In the remaining cases no improvement followed its use." In all the cases the roller bandage was employed. Dr. Stelwagon says his experience is negatively favorable, and the remedy is worthy of more extended trial. Of the six cases treated by Dr. Van Harlingen, professor of skin diseases at the Polyclinic, there was one quite successful case; two patients improved very much; the remainder made but two or three visits to the dispensary.

Still more favorable is the testimony to follow. Dr. R. M. Girvin reports two cases cured—no failures. One was that of a female with varicosity of the deep veins of both legs, with swelling and induration of the limb and spots of ulceration as large as a dime. The veins were enlarged and tender; the pain was intolerable. One teaspoonful of the fluid extract of hamamelis every four hours was ordered, and improvement was seen in three days; a cure in two weeks. No other treatment was used, and the patient was on her feet most of the time during the treatment.

Dr. Shelly, of Ambler, Pa., reports the following:

Female, aged forty-five, cook, varicose veins in both lower extremities of fifteen years' duration, unhealthy ulcer on outer aspect of left ankle joint of ten years' duration. Ulcer followed a hæmorrhage, and never healed. Both legs œdematous, the left much indurated. Eczema around the ulcer. Pains so great she has been confined to her chair or bed for one month. Treatment: hot bran baths and thin adhesive strips to left limb only; hamamelis in teaspoonful doses five times daily. Relief almost marvelous, being about the house in one week, and three months afterward the knotted and distorted veins had entirely disappeared, notwithstanding the continuance of her laborious duties. The rubber stocking which she had used for years was discarded, and its use has not been resorted to.

Dr. P. G. Skillern writes that he treated

Mrs. R., aged fifty, for varicose disease of the veins of the left leg, with secondary œdema, causing pain and fatigue on exertion. September 17th, ordered drachm doses of the fluid extract, and the distillate externally. October 1st she reported much relieved, and October 15th cured, experiencing no pain from the limb.

Dr. Preston, resident physician to the Presbyterian Hospital, and Dr. Coddington, holding a similar position at St. Mary's Hospital, report cures. The former used it but once, and with success. Dr. Coddington used it in several cases, with satisfactory results, and recalls distinctly one case, that of a middle-aged man, who took drachm doses of the preparation every two or three hours, with rapid and decided benefit.

To further illustrate the affinity this drug has for venous structures, Dr. W. E. Hughes writes that a case of phlebitis, secondary to chronic Bright's disease, was entirely and rapidly relieved by the use of this drug.

These reports ought to be of some avail to convince the most captious. It is thus seen that positive and negative results are given. The accuracy of observation can not be doubted, and hence conclusions can only be vitiated by two factors, the preparation used and the dose exhibited. It is difficult to make a numerical statement, and so it can only be said that this drug is of decided value in a certain proportion of cases of varicose disease. If an estimate were to be made of the proportion of cures and failures, without fear of exaggerating, it may be said that one fifth of all cases are cured, and that one third of the remainder are benefited. Even with this small percentage in its favor, from the inexpensiveness and simplicity of the plan, it behooves us all to try it. The testimony distinctly proves that the drug has a decided action on the veins.

The allusion to the preparation is timely. One gentleman told the writer he found the drug of no use. On inquiry, it was found the distillate—a white preparation—was used. Another reported a negative result, but used a preparation whose value is doubtful. The fluid extract is the most reliable preparation—a dark one—and that from the laboratories of Bullock & Crenshaw, or Parke, Davis & Co., the strongest, apparently. Regarding the dose, the writer feels that the one recommended in his former article is too small, and that if the amount or frequency were increased it would be valuable.

Other Uses of the Drug.—In addition to the foregoing testimony, Dr. Girvin gives the notes of two cases of hæmaturia that were cured by the exhibition of hamamelis:

1. Mrs. P., aged forty; hæmaturia; for six weeks had passed blood every day; some days in large quantities. She was anæmic, weak, without appetite, and rapidly failing. Test of urine showed albumin in large quantity, which Dr. Formad decided was due to the blood. Ordered thirty-drop doses of the liquid extract every three hours. The third day the bleeding ceased, and had not returned two months after the first administration of the drug. No albumin could then be found in the urine.

2. Mr. P., aged fifty-three, was relieved promptly of the same disease. "I have used it," he says, "in a number of cases of menorrhagia, and regard it as more certain in its effects than ergot or any other styptic in use for such conditions."

Dr. Dulles adds to his communication that he considers hamamelis a good astringent and a stomacheic tonic.

In conclusion, the writer desires to express his indebtedness to the many gentlemen for the privilege of using their notes.*

* Since this paper was read, Dr. Randall, resident physician at the Philadelphia Hospital, has reported as follows: One case of varicose disease not benefited. A second case of the same, with secondary ulcers and œdema, was relieved in three weeks. Treatment discontinued, a relapse followed; treatment renewed without benefit. In the third case the disease was of three years' duration, in a man, aged fifty-two. He had tried numerous remedies without benefit. The use of hamamelis and a roller bandage gave him decided relief. Finally he reports that D. K., aged forty-eight, a sufferer from "bleeding piles," had been cured in three weeks with drachm doses, four times daily, of the drug.

(To be concluded.)

NEW YORK OBSTETRICAL SOCIETY.

A STATED meeting was held October 16, 1883, Dr. C. C. LEE, President, in the chair.

VAGINAL HYSTERECTOMY FOR EPITHELIOMA OF THE CERVIX UTERI.—Dr. PAUL F. MUNDÉ related a case of epithelioma of the cervix uteri in which he had removed the uterus and the ovaries by the vaginal method at Mount Sinai Hospital six days before. The specimen was shown, and, as Dr. Mundé remarked, it seemed to indicate that the diseased tissue had been thoroughly removed. Thus far, the patient had done perfectly well. It was now a question how long the drainage-tube should be left in place. It was held by a flange, and there was no leakage around it.

Dr. T. A. EMMET thought the tube would have become so encysted at the end of a week as to answer no further purpose.

[*Note by Dr. Mundé, November 17th.*—The tube was removed on the eighth day, the ligatures and sutures on the sixteenth, all but one ligature, which was still retained five weeks after the operation. The patient left her bed on the fourteenth day, and the house during the fourth week.]

HENRY J. GARRIGUES, M. D.,

BENJAMIN F. DAWSON, M. D.,

FRANK P. FOSTER, M. D., *ex officio*,

Committee on Publication.

A STATED meeting was held November 6, 1883, Dr. W. M. POLK, President, in the chair.

TAIT'S OPERATION.—Dr. W. T. LUSK presented specimens and related a case as follows: The patient was sent to the hospital by Dr. Buchanan Burr, with the message that hers was "a good case for Tait's operation." She was twenty-four years of age, had been married four years, was sterile, had previously always been well, and had menstruated regularly and without pain. Within a year past she had begun to suffer from paroxysmal pains, commencing on the left side of the pelvis and extending upward across the abdomen and down the left leg. The pains were excessively severe, came on suddenly, lasted for several hours, and then entirely disappeared; the patient would feel that she was entirely well, when another paroxysm would occur before the lapse of twenty-four hours; they usually came on at night. Dr. Lusk, on examining her, found a tumor extending across the left half of the pelvis, and having its origin behind the uterus. There seemed to be obscure fluctuation; the consistence of the tumor enabled him to exclude fibroids; the absence of tenderness made it almost absolutely certain that it was not the result of pelvic cellulitis. The diagnosis then lay between a dilated Fallopian tube and a small ovarian cyst. The fact that the tumor was firmly adherent rendered ovarian cyst doubtful; in that case adhesions rarely formed while the cyst was small. On the other hand, it seemed impossible that the Fallopian tube could have attained to the apparent dimensions of the tumor. The patient was kept in the hospital a month to make sure that the pains were not hysterical, and that the tumor was not diminishing. As no relief was afforded, however, the patient was informed of the risks of an operation, and of the possibility of failure to produce relief. She concluded to have it done. An incision two inches and a half in length was made, the finger introduced, and the tumor recognized to be a dilated Fallopian tube. The extremity lay directly behind the uterus, and was firmly adherent to that organ. The entire tube, thus bent upon itself, filled the left side of the pelvis, and was, throughout its entire extent, adherent to the pelvic floor. The adhesions were separated with difficulty with the fingers. It was necessary to increase the abdominal opening to four inches in length before the tumor could be withdrawn. The appear-

ance was very much like that of large intestine, and its true nature was determined beyond doubt only after careful inspection. Sponges were packed into the cavity where the tumor had lain to absorb the slight amount of oozing which was taking place. A ligature was applied around the pedicle, and the tube removed. All bleeding had ceased when the abdominal wound was closed. The patient made an excellent recovery, no untoward symptom having developed; pain had since entirely disappeared. The origin of the trouble in the first place could not be explained; the patient had previously been healthy, had never suffered from pelvic peritonitis nor cellulitis, nor had she had venereal disease. There was said to be consumption in the family. The diseased tube contained pus; the other was healthy and was not interfered with.

Dr. LEE thought Dr. Lusk was to be congratulated on his ability to make an exact diagnosis in so obscure a case, and on the result of his operation. In such cases it was sometimes impossible to make the diagnosis before the abdomen had been opened, and, in obscure cases in which patients suffered as Dr. Lusk's did, he believed we were justified in making the exploratory incision, and, finding our suspicions verified, in removing the diseased tube, this being the only means which offered the patient relief from intense suffering. He referred to a similar case in which he proposed to operate if the patient's consent could be obtained. She had first consulted a distinguished physician in Vienna, Professor Braun, who believed her symptoms to be due entirely to constriction of the cervical canal, but she had an attack of pelvic inflammation following the examination, and could not undergo treatment. On her return to this country, she consulted Dr. Lee, who recognized a tumor evidently connected with the Fallopian tube and probably with the ovary, and recommended Tait's operation. The diagnosis was confirmed by Dr. Thomas and Dr. Emmet. The tumor had since suppurated and discharged pus through the rectum.

Dr. R. WATTS inquired whether the discharge of pus should not be taken as an indication of strong adhesions, and contra-indicate the operation.

Dr. LEE replied that we might in any case be compelled to abandon the operation on account of the extent and firmness of the adhesions, but this could not be positively predicted from the patient's previous history. He had operated successfully in one case in which there had been repeated attacks of peritonitis, and on two occasions the abscess had discharged into the rectum. Dr. Hunter had had similar experience.

Dr. LUSK remarked that nothing could have been more adherent than this tumor to the uterus, and he would probably have abandoned the operation had he not witnessed the immunity from danger which attended the digital separation of adhesions in the hands of Mr. Tait.

In reply to a question by the President, Dr. HUNTER said he agreed with the remarks made by Dr. Lee, that in such cases an abdominal incision was justifiable in order to arrive at a diagnosis. About two weeks ago he operated upon a patient who had recently returned from England, where she had been under treatment by Sir Spencer Wells for ovarian neuralgia. Galvanism and many other remedies had been employed, but without success. The patient had been married six years, had never been pregnant, menstruation had been steadily diminishing in quantity, and, during the past six years, had been attended with intolerable pain. During the past two years the pain commenced some time before, and continued for some time after the flow, the interval of rest being but a few days. The uterus was normal and not flexed. At the first examinations the ovaries could not be felt; subsequently enlargement of one ovary was made out with tolerable certainty. At the operation the right ovary was found much enlarged and cystic; the left was

cystic, but only slightly enlarged; both tubes were slightly diseased. The ovaries and tubes were removed. The patient was doing well; there had been scarcely any rise of temperature, and pain had disappeared. It was, of course, too early to determine the permanence of the result. Dr. Hunter had found Ferguson's speculum useful in cleaning out the cavity with sponges on handles. He mentioned some cases in which the ovary was not found diseased, but firmly bound down by adhesions, which in itself was sufficient to account for the pain from which the patient suffered during menstruation. In two instances in which the adhesions were very firm, and required great force in breaking them up, considerable bleeding took place. One of the patients recovered. In the other, secondary hæmorrhage occurred, and the patient died. The wound was reopened, but the bleeding was too deeply situated to be arrested. To illustrate the difficulty of diagnosis, he also mentioned a case in which enlargement of one ovary was diagnosed by several examiners, and at the operation the opposite one was found to be the larger.

Dr. J. BYRNE gave the symptoms and physical signs in two cases similar to Dr. Lusk's, in which he had contemplated Tait's operation, but hesitated somewhat because of possible extensive and firm adhesions. He was glad to have this point brought out in the discussion.

The PRESIDENT asked the members whether they had had any experience with Hegar's method in the diagnosis of these cases: viz., exploration of the posterior surface of the uterus with two fingers in the rectum, the organ being pulled down with the tenaculum in the vagina.

Dr. BYRNE thought there would be great danger of bringing on inflammation by such a procedure. One patient of his nearly lost her life from peritonitis brought on by manipulation during repair of the cervix.

The PRESIDENT said that pelvic inflammation would certainly be liable to result from Hegar's procedure, but he thought the risk might be assumed in cases in which opening of the abdomen would otherwise be necessary for diagnostic purposes.

OVARIOTOMY.—Dr. B. F. DAWSON presented specimens with the following histories: The first patient consulted him about two months ago, suffering from general nervous disturbance and neuralgic pains in the pelvis. The slightest pressure about the ovaries gave acute pain. The patient was subject to epilepsy, and had a seizure during the examination. Cystic degeneration of the right ovary was recognized. At the operation on the left ovary there was also found a small parovarian cyst, and this ovary was also removed. The patient made an excellent recovery, and was now sitting up.

Dr. DAWSON also presented a second ovarian cyst, removed on the 24th of September. He first saw the patient a year ago, when he told her it would ultimately require removal, and he kept her under observation until symptoms called for operation. Considerable difficulty was experienced in detaching some firm adhesions at the base, but the patient made a very good recovery. The clamp was employed to secure the pedicle, on account of exceedingly large vessels making ligation seemingly injudicious. The cyst was of the dermoid variety, and contained a large mass of hair, but no bone or teeth.

A third specimen was that of an ovarian cyst of the papillomatous variety removed from a patient at the Woman's Hospital that afternoon. The tumor was recognized to be a polycyst with considerable adhesions. The diagnosis was confirmed by Dr. Emmet. About a gallon of fluid, containing odorless purulent fluid, was withdrawn from the three compartments into which the cyst was divided, and the operation was difficult and protracted on account of extensive and very firm adhesions to the intestines, uterus, and bladder, requiring the actual cautery

and numerous ligatures. Of a large number of operations which the house staff had witnessed, in none had they seen firmer and more extensive adhesions. Owing to the uterine adhesions being almost inseparable, Dr. Dawson thought the only safe procedure was to apply his large clamp to the thick pedicle formed by the fundus of the uterus. The patient lost but little blood, and reacted well.

Dr. HUNTER asked whether it would not have been better, finding the adhesions so extensive, not to have proceeded with the operation.

Dr. DAWSON replied that the firmness of the deeper adhesions was not recognized until the upper ones had been detached. In answer to a question by Dr. Lee, as to whether it would not have been better to extirpate a portion of the uterus than to apply the clamp, he said the patient was not in condition for the operation to be protracted by such a procedure; moreover, his experience with extirpation of the uterus in one case had prejudiced him against its repetition.

HENRY J. GARRIGUES, M. D.,
BENJAMIN F. DAWSON, M. D.,
FRANK P. FOSTER, M. D., *ex officio*,
Committee on Publication.

NEW YORK MEDICAL AND SURGICAL SOCIETY.

A STATED meeting was held November 10, 1883, Dr. B. W. MCCREADY chairman for the evening.

PERITYPHLITIS WITH OBSCURE SYMPTOMS.—Dr. A. B. BALL related a case the chief interest of which was the obscurity of the symptoms. The patient was a boy, five years of age, who had recently returned from the country in perfect health. On Wednesday, the 24th of October, the child went to a lunch party, and there ate of various kinds of indigestible food. He experienced no inconvenience that afternoon, but vomited during the night. Irritability of the stomach continued the next morning, but, as the boy did not appear very sick, Dr. Ball was not sent for until afternoon, and then found him sitting up in bed, bright, and apparently not very sick; the temperature was about 100° F., and the pulse was a little above normal. A careful examination was made. Slight tenderness existed over the abdomen, but a little more marked in the right iliac fossa. No swelling nor induration could be felt at any point. In the absence of any other assignable cause, the case was believed to be one of indigestion. The child rested well during the night, and about the same condition was found to exist on the following morning; there was no more fever, and no more abdominal tenderness. Compound licorice powder was administered, but, that not having taken effect by 4 p. m., castor-oil was given, with the effect of producing five movements during the course of the evening. The next morning the child was evidently not so well; the temperature had risen a little above 101° F., the pulse was about 120, the abdomen was a little more sensitive, especially in the right iliac fossa; at the same time the tenderness in this region was by no means marked; there was not the slightest indication of any induration or swelling. The symptoms were still such as would point only to slight enteritis due to a very indigestible meal. Six leeches were applied to the right inguinal region, and drop-doses of Magendie's solution administered every three hours. As some uneasiness was felt in regard to the case, Dr. Sands was called in consultation, and he also was puzzled as to the exact condition present. He was inclined to think, however, that, while there was some inflammation in the region of the cæcum, there was no evidence of perforation of the appendix. The next day the child's condition was not worse; the temperature at no time went above 102° F., and the pulse ranged between 120 and 130. Monday

morning the child was much better; the temperature had fallen to 99°, the tenderness in the right iliac fossa had diminished, and the pulse was slower. The conclusion was then reached that perforation had not taken place; that the attack had probably been simply one of indigestion, and Dr. Sands thought it was unnecessary for him to see the patient again. That afternoon, however, the child was seized with repeated attacks of vomiting of a greenish liquid matter, and with symptoms of collapse. Dr. Ball arrived about two hours later, and found the extremities cold, the face pinched, the respiration almost entirely thoracic, and the child on its back with the legs drawn up—perforation into the peritoneal cavity had evidently taken place. Dr. Sands was present at about 8 P. M., at which time the temperature was 103° F., the pulse about 160; there was but little tumefaction over the abdomen; the tenderness was not great, but was more general than at any previous time. The case was pronounced hopeless. The child died the next morning. The mother had at no time ceased to reproach herself with the thought that she had been the sole cause of the child's illness. Feeling confident that the death was due to perforation of the vermiform appendix, and that the indigestible meal of the Wednesday previous could have no direct connection with the causation of such an accident, Dr. Ball insisted upon an autopsy, which was granted by the family. The examination was made by Dr. Ferguson, Pathologist to St. Luke's Hospital. Upon opening the abdomen, signs of general peritonitis were found; the coils of intestine were covered with a sero-fibrinous exudation; there was no pus in the general cavity. The coils of intestine in the right iliac fossa were so glued together that it was necessary to remove them *en masse*. There was a small amount of pus, perhaps a tablespoonful, deep in the right iliac fossa, alongside of and to the outer side of the appendix. The appendix was unusually long and convoluted in shape; it was perfectly healthy except near the extremity, where the canal was completely blocked by a hard, stercoral calculus of the size of a large bean. No nucleus was found on section. Beyond this point the gut was gangrenous and perforated. The adhesions between the coils of intestine indicated that perforation must have taken place at the commencement of the sickness. A collection of pus had formed gradually, and on the day previous to death had penetrated into the peritoneal cavity and excited fatal peritonitis. It now seemed probable that at the time when perforation of the appendix took place only a small portion of its contents escaped, causing but slight inflammatory reaction and no appreciable induration. Dr. Ball said that he had seen fourteen cases of perityphlitis, in adults and in children, and in all the previous cases there had been no difficulty in the diagnosis after the first twenty-four or forty-eight hours. In only one—that of a girl between four and five years of age—did death occur, and in that instance there were signs from the first that general peritonitis had followed perforation. In every case dullness on percussion and an indurated mass could be felt above the brim of the pelvis within two or three days of the commencement of the symptoms. In about half of the twelve cases which ended in recovery, abscess formed and convalescence was established after a variable length of time.

Dr. R. WATTS inquired whether examination *per rectum* had been made.

Dr. BALL replied in the negative; that the child was quite young, the symptoms did not point to the existence of inflammation outside the bowel, and it was not considered advisable to subject the patient to the inconvenience of a rectal examination. At the autopsy this point was considered, and it was regarded as doubtful whether any information would have been thus gained.

Dr. WATTS said that he made the inquiry because in two

cases in which the symptoms pointed to perityphlitis, but in which no tumor could be felt on external palpation, with the finger in the rectum a hard swelling was discovered in the right iliac fossa. One patient was aged twelve, the other nineteen years. Both recovered without operation.

Dr. BALL remarked that, in several of the fourteen cases mentioned, a swelling could be felt *per rectum*, but in each instance it was also evident on external palpation.

SYMPTOMS OF CROUP RELIEVED BY TARTARIZED ANTIMONY.—Dr. A. C. POST had been called in the evening to see a child, about two years and a half of age, whom he had been treating for an injury of the hand, and who then had symptoms of croup. The breathing was a good deal impeded from what appeared to be laryngeal causes; no membrane, however, was visible. Dr. POST therefore believed the case to be one of catarrhal laryngitis, with spasm of the glottis. Chloroform was administered, first, to relieve spasm, and, second, to enable him to incise the gums, which had been giving a little pain. Afterward a solution of tartarized antimony—one grain to eight ounces—was ordered to be administered in teaspoonful doses every half-hour until vomiting or relief followed. The child was doing well the next morning, and no further treatment had been required.

CIRSOID ANEURYSM OF THE WRIST.—Dr. POST mentioned the case, which was that of a young man who had presented himself at his clinic on that day. The aneurysm was of the radial artery, at the radio-carpal articulation, about twenty-five millimetres in diameter and four in elevation. The tortuous course of the vessel could be distinctly traced by the pulsation. The tumor had existed for several years, was gradually increasing, and had lately caused some disability of the hand. The treatment of such cases had often proved unsatisfactory, but Dr. POST proposed to tie the artery at several points should the patient return.

NEW YORK CLINICAL SOCIETY.

A REGULAR meeting was held September 28, 1883, Dr. J. H. EMERSON chairman for the evening.

STRANGULATED HERNIA.—Dr. ROBERT ABBE related the histories of two cases in which he had recently performed kelotomy. The first case was in a boy of ten years. Symptoms of strangulation had existed three days when the case was first seen. Taxis was tried, and it was at first thought that entire reduction had been effected. Closer examination, however, showed a small tumor in the groin which had not gone back. The symptoms persisted, and, after waiting two days, during which time the temperature rose to 102° Fahr., he operated. Upon cutting down, he found a bubonocoele of about the size of a walnut. It was found necessary to slit up the whole inguinal canal before it could be reduced. The intestine was of a purplish color, but showed no signs of gangrene. About two ounces of bloody serum were found in the sac, which was opened. Full Lister dressings were used in this case, and, without any untoward symptoms, the boy went on to a perfect recovery.

The second patient was a man of fifty-seven. Five days before coming under observation his hernia, an old one, had come down, and he was unable to reduce it. He took large doses of salts, castor-oil, and other cathartics for three days, eating nothing meanwhile, growing steadily weaker, and vomiting frequently. The vomiting finally became stercoraceous. The patient walked into Dr. Abbe's office. The hernia was quite large, a left oblique inguinal, and descended into the scrotum a little distance. Taxis was tried for fifteen minutes without any benefit, and the man was sent home. A few hours later he was visited, with the intention of operating, but before this was done taxis was repeated for about fifteen minutes, with some force, but very carefully. Upon cutting down, a piece of intes-

tine consisting of two coils was found, of a dark mahogany-color, but not gangrenous in appearance. The finger could be passed quite easily within the neck of the sac. The constriction was found to be at the internal ring. This was divided, and reduction was easily accomplished. Before it was returned, the gut was noticed to be very much colder than the rest of this intestine, and it was thought that this cold body in the peritoneal cavity might have added to the shock which followed.

The thick sac was dissected off to make the operation a radical cure. The canal was closed with two deep silver sutures, and the integument by catgut, and a drainage-tube inserted.

The patient rallied a little after coming out from the anæsthesia, but then sank again and died, from shock, five hours after the operation. No autopsy was made. It occurred to the doctor that perhaps the repeated taxis had increased the shock. He should not employ it in another case of the same duration, for, had a slight ulceration at the neck been present, rupture of the intestine was almost inevitable, no matter how carefully taxis was made.

Dr. R. J. HALL had recently read a review of a paper advising prolonged and repeated taxis, in which this was severely criticised. He himself was opposed to it, now that the danger of the cutting operation had been so much lessened by the employment of thorough antiseptics. In regard to the point that it was shock rather than septicæmia that caused death most frequently, he said that it was the shock of the strangulation rather than that of the operation. Many German surgeons were coming to regard shock after operations as always dependent upon septicæmia.

Dr. L. E. HOLT thought we should be governed in our employment of taxis by the acuteness of the symptoms. It was manifestly useless to prolong taxis in those cases of primary strangulation in which severe symptoms developed in a few hours, as the constriction was usually very tight, and every hour that the operation was postponed diminished the chances of success. In cases where the symptoms were three or four days in coming on the case was different.

SALIVARY CALCULUS.—Dr. ABBE also related a case of calculus of Wharton's duct and presented the specimen, which was of the size of a large pea. The patient was a man of thirty, who for two months had been suffering from what was supposed to be an ordinary abscess in the floor of the mouth opening to the right of the frænum. An induration had existed there for some months before suppuration took place. It appeared like a sinus leading to necrosed bone, and, a probe being introduced, something resembling this was struck. The sinus was slit up, the small calculus was removed, and prompt recovery took place.

Dr. C. B. KELSEY had come across one in the dissecting-room, in the substance of the submaxillary gland, of about four times the size of the one shown by Dr. Abbe.

CANCER OF THE RECTUM.—Dr. KELSEY reported the following case of cancer of the rectum high up, which had presented great difficulty in diagnosis in its early stage. The patient was a gentleman of forty-eight, without any family history of cancer, who came to the doctor saying he had hæmorrhoids. For two weeks he had complained of pain in the sacrum, which was so severe as to keep him awake at night. He had had a sort of diarrhœa for the same time, the passages being streaked with blood. On examination, nothing whatever was found. A full-sized bougie was passed in its whole length. An enema of three pints was given easily. These signs were thought sufficient to exclude stricture. The patient had an attack of dysentery three years before, but no rectal symptoms until two weeks before. By exclusion, Dr. Kelsey arrived at the diagnosis of cancer high

up, although the general condition of the patient was excellent, and no infiltration could be made out.

Bismuth and morphine suppositories were ordered with the effect of relieving him of his bloody diarrhœa in a week. He was then sent to Europe. On his return, a few months later, the cancerous cachexia was well marked, and the infiltration could be felt through the abdominal walls. Rectal symptoms were absent, however. So firmly convinced was the doctor upon his first examination of the diagnosis of cancer, that, had he believed in the operation, which he did not, he should not have hesitated to cut down, with the idea of excising the growth. Of the ten patients on whom the operation had been done, five had died immediately after the operation, and the remainder had not lived longer than they otherwise would have done.

In reply to the question, whether he considered a fixed pain in the sacrum pathognomonic of cancer high up, Dr. Kelsey said that he did, when it was associated with a muco-bloody discharge, and no other cause could be found for the symptoms.

Dr. ABBE asked if an acute exacerbation of an old dysenteric ulcer might not give similar symptoms, though not visible on examination.

Dr. KELSEY thought it would not produce the same fixed and severe pain.

SYPHILITIC DISEASE OF THE RECTUM.—Dr. KELSEY reported another case of ulcers of the rectum, undoubtedly syphilitic, promptly cured by local treatment, in which constitutional measures had produced no beneficial results. The patient had suffered from gummata in various parts of the body, and gave a clear history of syphilis. For several months he had suffered from pain in the lower part of the abdomen and a mucous discharge. He had been at the Hot Springs for treatment, and had been saturated with mercury and the iodides. On examination, there were found just within the sphincter two ulcers, one an inch, and the other nearly two inches in diameter. They were not elevated, and could be easily felt with the finger. Strong nitric acid was applied, and the patient was put upon a milk diet and kept in bed. The pain disappeared at once, and in a month they were perfectly healed.

TONIC SPASM OF THE TRAPEZIUS MUSCLE.—Dr. HOLT related a case. [See p. 629.]

Dr. V. P. GIBNEY said he had searched through the literature of malarial paralysis and spasm recently, and had come to the conclusion that these cases were very rare. He was inclined to regard this case as one, however. Tenderness he had invariably found present in muscular spasm from cold. Electrical sensibility was also increased. He would like to have seen what effect the strong galvanic current or actual cautery, which lately had been so highly recommended by some authorities, would produce in this case.

AFTER-PAINS.—The CHAIRMAN reported a case of unusually severe after-pains in a multipara who was delivered of twins. Labor came on about two weeks before the expected time, and had been several hours in progress when he saw the case. After the first child was born, which had presented by the vertex and was of small size, another was found, also presenting by the vertex, and the cord was prolapsed. Pulsation had ceased. While waiting for the forceps, ergot was administered. The forceps was applied and a somewhat larger child than the first was extracted, deeply cyanosed. It breathed afterward, but finally died cyanotic in five hours. The cyanosis he thought due to cardiac disease, and not to the protracted delivery. The after-pains were the most severe he had ever seen. Opium in large doses was tried, then quinine, then turpentine stupes; all proved ineffectual, and the inhalation of chloroform was resorted to at intervals for thirty-six hours before the pains ceased. The placenta was large and single; two cords were present.

Dr. HOLT asked whether any member of the society had ever used gelsemium for after-pains. In a patient recently who could not bear opium, and in whom all the usual local applications had given no relief, he had used the fluid extract, in doses of a fraction of a drop, frequently repeated. The pains were very severe and very prompt, and decided relief was experienced.

Dr. F. P. FOSTER thought gelsemium an uncertain and a dangerous drug under any circumstances. He referred to several cases of death attributed to its use in medicinal doses.

Dr. J. E. WINTERS had often used the fluid extract in ten-minim doses in neuralgias, and had never seen any bad effects produced.

L. EMMETT HOLT, M. D., *Secretary*.

Reports on the Progress of Medicine.

ANATOMY AND PHYSIOLOGY.

By GRAEME M. HAMMOND, M. D.

ON A METHOD OF DEMONSTRATING THE CONNECTIONS OF THE BRAIN IN HEALTH AND DISEASE.—Dr. D. J. Hamilton ("Brain," July, 1883) states that to investigate the course of the brain fibers the organ must be completely hardened into the center. The hardening fluid to be employed is a mixture of Müller's fluid, three parts; methyl alcohol, one part.

This mixture must be kept in the dark and not made until it is going to be employed. The brain must be injected on three successive days from one vertebral and the two carotids. Between fifty and sixty ounces should be injected the first day, and from thirty to forty on the second and third days. Considerable force should be used in injecting the fluid, but care must be taken not to rupture the membranes. The brain should now be kept in a large jar filled with the same fluid. In a month from the last injection it should be cut into slices one inch thick and placed in the hardening fluid for another fortnight. To complete the hardening, place the segments in pure methylated spirit, separating one from the other by pieces of linen, and leave them for two weeks. To color the convolutions, dry them by exposure for two or three hours, and, after adjusting the segments, rub gold size, mixed with vermilion, lamp-black, or oxide of zinc, into the membranes with a camel's-hair brush. The only method by which these sections can be cut is by freezing. First let the sections remain in water, which must be constantly renewed, for three days, then place them for a fortnight in the following solution:

Sirup (1 ounce, by weight, crystallized sugar to 1 fluid-ounce of water).....	4 ozs.
Mucilage (1 pound gum acacia to 80 ounces water)....	5 "
Water.....	9 "

Mix and saturate, by boiling, with boric acid. Filter through muslin. The sections are cut in a microtome purposely constructed for frozen sections, and are thrown into a dish of water in which is a sheet of glass covered with the following preparation:

Soak a quantity of French gelatin in water for half an hour, melt, and measure it. Take three times as much water and add sufficient carbolic acid to make a one-to-forty mixture. This should be applied just before the section is cut, and should be firm but not dry. The section is raised out of the water on this plate, drained, and covered with the same solution applied hot. When dry, brush over the specimen, and for two inches beyond, with liquor potassæ (Brit. Pharm.). Leave it on five minutes,

and set in a cool place for twenty-four hours. Now cut the gelatin around about an inch from the preparation and strip it off. If it is now placed in water it expands to nearly double its original size, the gray matter remains transparent, and every bundle of fibers in the white matter is clearly marked. The specimen should be mounted on glass in glycerine jelly, and the edges of the cover glass cemented down with the following:

Gum damar.....	8 ozs.
Benzol.....	8 fluidozs.

Dissolve, filter, and rub in 7 drs. of oxide of zinc.

THE ENOEPHALIO CENTER OF PERCEPTION; ITS SITE AND SECONDARY NATURE.—Brigade-Surgeon T. Oughton ("Lancet") remarks that by center, in neurology, is usually meant an anatomical disposition of gray neurine (ganglion), marking the afflux and efflux of nervous currents. The centers of secondary perceptions may be typified by the center of motion of a gyrating wheel, both being effected by an intrinsic reacting on an extrinsic force; in the case of the wheel, its intrinsic shape and pivoting react on the applied force to generate a plane of motion together with its center, and in the place of the perceptions, collectively, the intrinsic force of sensation reacts on the extrinsic force of a secondary (muscular) perception, to produce a center of apparent direction holding a defined relationship to the corresponding objective during its gyrations about it by muscular influences. Every articulation in exercise during voluntary motion is more or less a center of secondary perception. Our further analysis of the present topic will consist in reducing all secondary perceptions to one or other of three planes of direction, either isolated or combined—namely, (1) an antero-posterior vertical plane, having reference to all dextral and sinistral perceptions; (2) a lateral vertical plane, related to all forward and backward perceptions; and (3), a horizontal plane holding relation to all upward and downward perceptions. It will be obvious that the points of intersection of three such planes will mark the position of the required center. The first, or antero-posterior plane, is described about the median line of the body. The second, or lateral plane, is described on a line uniting the two external auditory meati. The third, or horizontal plane, is very distinctly definable by experimental observation as one that is described on a line uniting the two centers of visible direction (binocular axle). Thus an ultimate fact is offered for consideration—namely: that the encephalic center of perception coincides with the point of intersection of a vertical plane that is median, a lateral vertical plane corresponding with the line of juncture of the external auditory meati, and a horizontal plane corresponding with the binocular axle. The said center is only in efficient operation during the most natural of conditions; let these exist, but the slightest abnormality, even monocular vision, and other centers, come into an independent action, clearly evidencing that the center of perception is not the center of every perception.

THE DOCTRINE OF MOTOR LOCALIZATIONS IN THE CORTEX OF THE CEREBRAL HEMISPHERES OF MAN.—Charcot and Pitres ("Revue de médecine"), after thoroughly investigating the observations contradictory to the theory of cortical motor localizations, reject them for the following reasons: First, because they refer to cases of intra-cranial tumors. Second, because they are cases confused with multiple or diffused lesions. Third, because they are accompanied by clinical histories and post-mortem examinations that are either manifestly erroneous or else incomplete. A number of cases are cited, and the pathological conditions and the symptoms arising therefrom are given, together with the reasons why they can not be accepted as evidence contrary to the theory of motor localizations.

In concluding the subject, the brain is separated into two zones: the one *non-motor*, in which destructive lesions are

never accompanied by permanent paralyses; the other *motor*, in which destructive lesions always produce permanent paralyses on the opposite side of the body. The *non-motor zone* comprises (a) the prefrontal region (orbital lobe, and 1st, 2d, and 3d frontal convolutions); (b) the occipito-parietal region (occipital lobe, superior and inferior parietal lobules); (c) the temporo-sphenoidal lobe.

The *motor zone* comprises only the ascending frontal and ascending parietal convolutions, and the paracentral lobule.

Whether paralysis, due to a destructive lesion of the cortex, is total or partial, it is, after a certain interval of time, always followed by secondary contractions in the paralyzed muscles and descending degeneration of the pyramidal fasciculi.

Irritative lesions of the cortex give rise to epileptiform convulsions, which can be distinguished from true epilepsy by the presence of a motor aura, either limited to one side of the body (hemispasm), or to a single group of muscles (monospasm). Generally the lesions provocative of epileptiform convulsions are situated in the neighborhood of the cortex, a destruction of which would be followed by paralysis of those muscles which are first convulsed by the advent of the aura.

Miscellany.

THERAPEUTICAL NOTES.—*Turpentine in Secondary Syphilis and in Phagedenic Sores following Fever.*—Deputy Inspector-General Nicholson, M. D. ("Medical Times and Gazette," September, 1883), gives some of his personal experience with "this most useful medicine" in these two classes of cases. In a *dépôt* hospital that fell under his charge were two patients, both of whom had had syphilis, and, after having been discharged, had returned to the hospital with syphilitic plagues—induration of the skin and of the subcutaneous tissue above and below Poupart's ligament. Both had apparently recovered under the use of iodide of potassium and rest, but both had quickly suffered a relapse. On their return they hobbled about with difficulty. They were put to bed and given iodide of potassium internally, and local compression was made by means of leaden plates and bandages. They improved apparently, and one of them soon pronounced himself, and seemed to be, quite well. However, because of his previous relapse, he was kept under treatment a while longer, and then put on light duty as a convalescent. But he soon came back in as bad a condition as ever. The former treatment was resumed, and both he and the other patient were also given turpentine, in drachm doses twice a day, made into an emulsion with liquor potassæ and water. Both were promptly cured and discharged. As neither of them returned, their cure was presumed to be permanent. Another similar patient, treated in like manner, was likewise cured, though his case had previously resisted all treatment. [Dr. Nicholson's success in syphilitic plagues led him to try turpentine in orechitis from various causes, in venereal buboes, suppurating and non-suppurating, and in other swellings, but without the slightest success.]

In West Australia, a lad of ten was attacked with a continued fever, which was apparently endemic in that region. It was mild in type and had never proved fatal. The boy, though well nourished, was not very strong constitutionally. His convalescence threatened to assume that chronic ill-health that sometimes follows typhoid fever. During its course he was unexpectedly attacked with two indolent phagedenic ashy-colored sores, one, somewhat superficial, over the right trochanter, the other, deeper on the front of the middle and upper part of the left thigh. The former exposed the tendon, and the latter laid bare more than an inch of the femur. The edges of the ulcers were swollen. Vigorous local treatment, in conjunction with the internal administration of tonics and alteratives, failed to effect a cure. Turpentine was at length resorted to, in twenty-minim doses. Improve-

ment followed, at first quite slow and gradual, afterward more rapid and satisfactory, so that the sores seemed advancing to a speedy cure. In the absence of Dr. Nicholson for a week or so, the case was temporarily under the care of another practitioner. The latter left off the turpentine and local compression, as the patient was progressing so favorably that they did not seem to be needed. A change for the worse was the result. And, though the sore over the trochanter healed slowly when the previous treatment had been resumed, it was months before the larger one on the thigh could be made to heal. The child never enjoyed good health again. He was pale, emaciated, with a sickly yellow look, and lame from the serious loss of flesh about the nuder on the thigh, so that he could go about only in a perambulator. He did not long survive, though the particulars of his illness and death escaped the knowledge of Dr. Nicholson, who had changed his residence. Dr. Nicholson concludes his paper by saying: "Whether I tried turpentine in this case, as a local application, I can not now distinctly remember. If I did not, it was, I think, a regrettable omission."

Is Sulphate of Cinchonidine an Oxytocic?—Dr. W. O. Henry, of Pawnee City, Neb. ("St. Louis Medical and Surgical Journal," November, 1883), has made some observations in his own practice to satisfy himself whether or not sulphate of cinchonidine has oxytocic properties. He believes this question to be one of no little practical importance to physicians who practice in "malarial" regions. Women from three to six months pregnant, when attacked by malaria, are very apt to present symptoms of abortion. If it be desired to administer cinchonidine in such cases it would be well to know definitely whether or not this agent would increase the tendency to abortion. Dr. Henry cites three illustrative cases and says: "From these and other considerations I conclude as follows:

"1. Cases of threatened abortion, of malarial origin, are controlled by cinchonidine by reason of its specific powers.

"2. When labor has begun, cinchonidine will increase the strength and duration of the pains, in consequence of its general tonic properties.

"3. Cinchonidine will not, in any case, in ordinary doses, originate uterine contractions.

"4. If these conclusions are true, as I believe them to be, cinchonidine is not, properly speaking, an oxytocic."

THE USE AND ABUSE OF PESSARIES.—This subject has before now been discussed from the point of view of the proper selection of cases in which pessaries are or may be useful. The subject has various bearings. In the first place, the statistics of Vedeler and Herman, quoted in this journal, show that antelexion is more normal than any other condition in multiparous women, and that flexions, as flexions, do not, as a matter of fact, cause dysmenorrhœa. It is impossible to conclude that if flexions do not cause the most direct of all uterine symptoms—dysmenorrhœa—they will cause the symptoms known as indirect or remote, for a test of which we refer our readers to the text-books *passim*, and which include almost every ailment to which female flesh is heir. This being the case, it follows that flexions, as flexions, should not be treated. But, secondly, we will suppose a typical case in which pessaries are known to do good—namely, more or less descent of the uterus, with or without retroversion or retroflexion (which are most probably indications of descent), and we will suppose a pessary to be inserted—what amount of attention (i. e., attendance) should this entail? Undoubtedly a woman wearing a pessary should not be sent away ignorant of its presence, and without any directions. She should therefore be informed that such an instrument has been inserted; and she should be given certain directions. Thus, it is advisable at once to tell her that it is well to wash out the vagina once or twice a day with simple water, which will prevent secretions from accumulating, decomposing, and causing an unpleasant smell (which in some cases is bad enough to suggest the presence of cancer); she should also be told that soreness, itching, or profuse discharge indicates that the pessary should be seen to, and, generally, that it should not be worn without being seen to three or four times a year. It is also usually advisable that the doctor should satisfy himself in a week or so that the pessary is doing good, and doing no harm, and then, having once started the treatment, the patient should be left to test its efficacy. Now, this test implies the

removal of some symptoms or symptom, which may justly be attributed to some former morbid condition, and it also implies the locomotion of the patient. Generally speaking, a patient lying down is better without a pessary, whatever displacement is present; thus it is rare for even complete procidentia not to reduce itself, or become much smaller, when the patient lies down, and the symptoms of partial descent, which (if there are any symptoms at all) will include almost certainly a sense of weight and dragging pain in one or other iliac fossa, will disappear, or become greatly diminished, in the recumbent position. A pain which is better when the patient is standing and worse when she is lying should be regarded with suspicion if supposed to be due to descent or displacement: it is probably nothing of the kind. Thus it is to relieve pains increased by standing that pessaries are most generally useful. If this is not effected, the uterus may be unquestionably in the "normal" position, but the pessary is useless, and, if useless, injurious. Thus, the proper use of pessaries is first, in most cases, after the insertion of the pessary, to get the patient on her legs; secondly, to satisfy one's self in a few days that it is doing good and is doing no harm; but, as soon as both these objects are attained, to send the patient away to test the treatment, with the above directions. It should not be the task of months to fit a woman with a pessary, any more than with a truss. The following are *not* instances of the proper use of pessaries. To keep the patient in bed for long periods wearing a pessary; to see her every day, every other day, twice a week, for weeks, months, or years. Perhaps such visits are not made to the patient, but to the pessary. However that may be, it is not the pessary, but the patient, who has to pay. What should we say of a surgeon who called for months to see a patient to whom he had given a wooden leg or a truss, and who kept him in bed for long periods; or of an oculist who had fitted a patient with spectacles, and saw him every day for several months, whether the spectacles seemed to suit him or not? It is true that the pessary is a truss in the dark, but that is no reason why the management of a pessary should be a deed of darkness. Recent investigations have shown that the whole question of displacements has to be reconsidered. It can not be too widely or too dogmatically stated that prolonged treatment by pessaries, such as we have described, is quite inadmissible and unnecessary; and, if unnecessary, injurious not only to the patient—i. e., to her *morale* as well as her purse—but also, in the best sense, to the practitioner; and, if to the patient and practitioner, then to the public and the profession. It should also be realized that a pessary is a mere form of truss, and that its operations, though removed from the general view, are not occult. Ill-treatment bids fair to bring this useful form of truss into disrepute, and we are daily expecting to meet the practitioner whose sensitiveness is such that he shrinks from a cure whose name he has learned to mistrust and dislike; but we feel bound to say we have not come across him yet.—*Lancet*.

THE COMFORT OF MEDICAL STUDENTS.—Speaking of the Harvard Medical School's new building, the "Medical Times and Gazette" says: "There is a spacious reading-room, a library, a coat-room, lavatories, and—a smoking-room. It is indeed a new step on the part of the authorities to recognize that the student is a being with bodily frailties like themselves. Hitherto in most medical schools it appears to have been an article of belief that the student had no appetite or thirst that needed solacing or quenching; that his backbone was of iron, and his ischial tuberosities of adamant; that he could see like a bat, and flourish on carbonic acid like a bay-tree. As to his being so weakly organized as to need an occasional fillip from excisable articles—such as tea, coffee, alcohol, or tobacco—that is a notion to which many authorities still remain blind. There is another side to the question, as one of the speakers at the Boston ceremonial seemed to suspect when he quoted the lines—

'Ill fares the land to hastening ills a prey,
Where wealth accumulates and men decay.'

The appetite for comfort grows by what it feeds on, and, when we find our students lolling over their afternoon tea or cigarettes in all the luxury of a club-room, we may look back with regret to the days when theatre benches were hard and polished by long sitting, when the pipe was a surreptitious open-air indulgence, and tea was left to women."

PREHISTORIC TREPHINING.—Mr. T. F. I. Blaker, M. R. C. S., writes as follows to the "Lancet": "That many operations in surgery were practiced in remote times is undoubted, but I think few surgeons realize how very ancient indeed is the operation of trephining, or, as it was formerly called, trepanning, the skull. During recent years some curious discoveries have been made in France and elsewhere conclusively proving that trephining was practiced by neolithic man, and, further, that the operation was oftentimes successful. These later stone-age men must have inhabited Europe several thousand years ago, and were, of course, excessively barbarous, ignorant, and superstitious. Indeed, it was their very superstition which led them to trephine the skull—so Professor Broca informs us, and he has given the subject his greatest attention. Trephined human skulls have been found by Dr. Prunières of Toulouse in the cave of Homme Mort in the Department of Lozère, in the caves of La Marne and of Lorges, near Pau, in the Canary Isles, in Algeria, in Mexico, and in Peru. The operators had, of course, no better instruments than more or less perfectly sharpened flints, and with such rude tools they performed their operation. First a **V** or **T** incision was made down to the bone, the flaps were retracted by assistants, and the bone was then persistently scraped until at length an opening was made sufficiently large to expose the brain and its membranes. This opening was a *viaticum* or way of escape for the demons who had taken possession of the body and were causing the epilepsy or insanity, for such were the 'cases' which were operated on.

"Now, considering the class of case, the desperate nature of the operation, and the barbarous method of performing it, to say nothing of the after-consequences—e. g., hæmorrhage, blood poisoning, erysipelas, the danger of injury to the brain, the want of proper nursing, and bad hygienic surroundings generally—it is wonderful that any one patient should have recovered; and yet, incredible though it seems to be, Dr. Prunières states that out of twenty skulls in his possession (all of which were trephined during life) nineteen of them exhibit indubitable signs of having recovered from the operation. This is shown by the fact of the edge of the bone having become smooth in consequence of the cells of the diploë having become covered by the newly formed bony tissue.

"The discs of bone which were separated from the skull during the operation were looked upon as talismans possessing vast therapeutical power and capable of counteracting witchcraft, and of preserving the possessor of them from disease. These talismans were therefore worn round the neck as amulets, and were considered as of priceless value.

"After the death of a patient who had survived the operation, it was considered 'only fair' to give the original possessor of the piece of bone so highly prized his own back to him once more. Professor Broca tells us that this was done in order that the deceased might carry with him into the next world this talisman, and so be preserved from the torments of the evil spirits which had haunted him on earth. This, says Professor Broca, is the earliest indication we have of a belief in a life beyond the grave. There is a touch of humanity to be discerned both in the operation itself and also in the restoration after death of the precious amulet to its rightful owner. This is the more remarkable when we consider what 'untutored savages,' if not cannibals, these neolithic men were."

THE INTERNATIONAL MEDICAL CONGRESS OF 1884.—We lately published the provisional programme of the section in psychiatry and neurology of the International Medical Congress to be held in Copenhagen next August. That of the section in obstetrics and gynaecology is as follows: 1. The Antiseptic Method in Laparotomy, Dr. Mikulicz. 2. Anæsthesia in Laparotomy. 3. Early Ovariectomy, Mr. Knowsley Thornton. 4. The Treatment of Fibro-miomata of the Uterus by Laparotomy, M. Keberlé. 5. Oöphorectomy for Fibro-miomata of the Uterus. 6. Oöphorectomy for Nervous and Mental Diseases, Dr. Hegar. 7. Vaginal Extirpation of the Uterus for Cancer, Dr. Schroeder. 8. Dilatation of the Uterus. 9. The Operative Treatment of Prolapse of the Uterus and Vagina. 10. Ovulation and Menstruation. 11. The Operative Treatment of Extra-uterine Pregnancy, Dr. Litzmann. 12. On an International Obstetrical Nomenclature, Dr. A. R. Simpson. 13. Albuminuria Gravidarum, Dr. Halbertsma. 14. The Treatment of Abortion, Dr. T. G. Thomas. 15. The Management of the Placenta, Dr.

Stadtfeld. 16. Anæsthetics in Midwifery. 17. The Treatment of Rupture of the Uterus. 18. The Treatment of Neglected Shoulder Presentations. 19. The Cæsarean Operation and its Substitutes, Dr. P. Müller. 20. The Statistics of Puerperal Fever in Denmark, Norway, and Sweden.

PROFESSOR DUBOIS-REYMOND.—The twenty-fifth anniversary of the appointment of the eminent scientific worker, Dr. Emil Dubois-Reymond, to the chair of physiology in the University of Berlin, has lately been celebrated. On the death of the celebrated Johannes Müller in 1858, the chair of Anatomy and Physiology, which he had long held with distinction, was divided, the anatomical department being assigned to Professor Reichert, then of Breslau, and the physiological to Dr. Dubois-Reymond, who had been an extraordinary professor since 1855. On October 20th, a large number of Dr. Dubois-Reymond's pupils assembled in the Physiological Institute, and presented him with his bust, and a "jubilee volume" (*Jubelband*) of the "*Archiv für Anatomie und Physiologie*." The presentation of the bust was made by his oldest assistant, Professor Heidenhain, of Breslau, while the volume of the "*Archiv*" was presented by Professor Rosenthal, of Erlangen, both of whom made congratulatory speeches. Addresses of congratulation were also delivered by Professors Virchow, Munk, Fritsch, Hirsch, and others; and similar tokens of respect were received from Professor Holmgren, of Upsala, Professor Tschirreff, of St. Petersburg, and the Faculty of Medicine of the University of Aberdeen. On the following day, a dinner was given in honor of Professor Dubois-Reymond by his colleagues, pupils, and friends.—*British Med. Jour.*

THE UNIVERSITY OF WÜRZBURG.—The new anatomical department was opened on the 3d of November. The "*Medical Times and Gazette*" states that Professor Kölliker delivered an address in which he sketched the history of anatomical instruction in Würzburg. Dating originally from 1719, the department was reorganized in 1783, when the famous surgeon von Siebold delivered the opening oration. The building in which instruction was given remained unaltered until within quite recent times, and many well-known men have been connected with it, of whom Virchow and Kölliker are the most famous. The increase in the number both of the students and of the branches of science taught therein had long rendered the construction of a new anatomical school a necessity, and at length a building has been obtained which answers in all respects to the increased demands of modern science.

NITRITE OF SODIUM.—Dr. Sydney Ringer writes to the "*Lancet*" to say that the dose of nitrite of sodium should be small, two or three grains, and not *twenty*, as stated in his "*Handbook of Therapeutics*." It has been ascertained that, in the cases in which twenty-grain doses were prescribed by Dr. W. T. Law, a year and a half ago, the specimen of the salt employed was very impure, containing a large percentage of the *nitrate*.

THE SURGICAL TREATMENT OF RENAL CALCULUS.—At a recent meeting of the Sheffield Medico-Chirurgical Society ("*British Medical Journal*," Nov. 10, 1883) a paper on this subject was read by Mr. Garrard, the chief part of which was taken up by the relation of two cases. In one he had successfully removed by nephrectomy a uric acid calculus, weighing forty grains, from the pelvis of a man's kidney, at the Rotherham Hospital. The man had never had any symptom of calculus, except a deep sinus in his left loin, over the kidney. The wound was entirely healed in six weeks, without any bad symptom of any kind. The other case was one of strumous kidney, with pyelitis and perinephritic abscess, which was at first thought to be a case of calculus. The kidney was explored, the pus evacuated, but no stone was found. After careful examination, a drainage-tube was left in. The patient at first went on improving, but ultimately, in three months, sank exhausted by the drain from the sinus, which never closed. A post-mortem examination revealed the fact that the kidney-structure was replaced by caseous tubercles, which had softened down, leaving little else than the capsule, inclosing a bag of pus, and only a small shell of recent phosphatic deposit. In conclusion, Mr. Garrard thought that cases of calculus would be found to show better results than any other cases of renal disease which were suitable for operative treatment; that nephrectomy, in such cases, would be found remarkably free from

risk; and, while admitting the great difficulty of making a certain diagnosis in renal calculus, the exploration of the kidney was thoroughly justified, especially since large wounds were now much better treated than formerly.

SUDDEN DEATH IN HYSTERIA.—An instance of this rare occurrence having been reported by M. Mollière at a meeting of the Société des Sciences Médicales, of Lyons ("*Lyon médical*," November 11, 1883), M. Laure remarked that he had met with a similar one in which it was very difficult to determine the actual cause of death. The hysterical attacks arose from the pressure of a medullary tumor. He was also cognizant of a case closely analogous to M. Mollière's. It was that of a young female under treatment for hysteria in the Croix Rousse Hospital, who died from syncope on the third day after her admission. The results of the autopsy were entirely negative. A case precisely like this had previously occurred in one of the great Parisian hospitals. M. Mollière said that he was not aware of any recent incidents of the kind.

AN ETHEROMANIAC.—In the "*Gazette des Hôpitaux*" Dr. Sedau relates the case of a youth—one of the brightest and most diligent scholars in his lyceum—who, when only ten years of age, contracted the habit of drinking ether for the purpose of stimulating his mental faculties. He gradually increased his allowance of the narcotic until it sometimes amounted to 1,000 grammes, or even to a litre, in twenty-four hours—partly swallowed and partly inhaled. In the intervals of intoxication he would solve the most difficult problems in the higher mathematics, and would then go out secretly at night, and even steal from his relatives, in order to procure the drug. All efforts to subdue the propensity proved unavailing, but his general health never seemed to suffer directly from its effects; and death, after many years of indulgence, was caused by mitral insufficiency of ante-natal origin. Toward the last he had recourse also to subcutaneous injections of ether and morphine.

ARMY INTELLIGENCE.—*Official List of Changes of Officers serving in the Medical Department of the United States Army from November 24, 1883, to December 1, 1883.*—WOLVERTON, WILLIAM D., Major and Surgeon. Assigned to duty as post-surgeon at Washington Barracks, D. C. Par. 7, S. O. 222, Department of the East, November 27, 1883. — BROWN, PAUL R., Captain and Assistant Surgeon. Assigned to duty in the Department of Arizona. Par. 4, S. O. 273, A. G. O., November 28, 1883. — MERRILL, JAMES C., Captain and Assistant Surgeon. Relieved from duty in the Department of the East, and assigned to duty at Columbus Barracks, Ohio. Par. 4, S. O. 270, A. G. O., November 24, 1883. — BREWSTER, WILLIAM B., First Lieutenant and Assistant Surgeon. Extension of leave of absence granted September 15, 1883, further extended two months. Par. 4, S. O. 271, A. G. O., November 26, 1883. — MADDOX, THOMAS J. C., First Lieutenant and Assistant Surgeon. Granted leave of absence for two months. S. O. 136, Department of the Missouri, November 24, 1883.

NAVAL INTELLIGENCE.—*Official List of Changes in the Medical Corps of the Navy during the week ending December 1, 1883.*—MEDICAL INSPECTOR D. KINDLEBERGER to be relieved from duty on the retiring board on December 9th.

SOCIETY MEETINGS FOR THE COMING WEEK.—*Monday, December 10th:* New York Academy of Sciences (Section in Chemistry and Technology). *Tuesday, December 11th:* New York Surgical Society; East River Medical Association (private); Medical Societies of the Counties of Chemung, Rensselaer, and Ulster, N. Y., and Morris, N. J.; Newark (N. J.) Medical Association; Jersey City Pathological Society; Trenton (N. J.) Medical Association (private). *Wednesday, December 12th:* New York Pathological Society; American Microscopical Society of the City of New York; Medical Societies of the Counties of Cayuga (semi-annual), Cortlandt, and Montgomery, N. Y., and Middlesex, N. J. *Thursday, December 13th:* New York Laryngological Society (annual); Society of Medical Jurisprudence and State Medicine (annual); Harlem Medical Association (private); Brooklyn Pathological Society. *Friday, December 14th:* Yorkville Medical Association (private); Medical Society of the Town of Saugerties, N. Y.

Original Communications.

THE PREVENTION AND TREATMENT OF
PUERPERAL FEVER.*

By T. GAILLARD THOMAS, M. D.,

CLINICAL PROFESSOR OF DISEASES OF WOMEN IN THE COLLEGE OF PHYSICIANS
AND SURGEONS, NEW YORK.

At a time when a flood of literature pours in upon the practitioner of medicine from numberless sources, upon every conceivable subject connected with his calling; when original ideas are spread out over space as gold-beaters hammer foil; and when the changes are rung upon every meritorious essay by a host of others which offer the reader merely the same thoughts in different words—it is pertinent and justifiable for every member of this audience to demand the motive, or, as our Gallic neighbors would express it, “the *raison d'être*,” of a paper upon so trite a subject as the present, and one which has already received the attention of many of the brightest intellects devoted to obstetrics.

I accept this challenge to-night, and, before beginning my essay, shall strive to justify, if I can, its preparation. I freely confess that it contains nothing that is original, nothing which has not elsewhere been as fully and as clearly stated, nothing which has not already received careful consideration at the hands of the progressive obstetricians of the world. And yet I am not only emboldened to present it, but even to hope that it may be regarded as worthy of the attention of those who listen to its reading to-night, and that, in its dissemination among many in this country in whose medical pupilage I have taken part, it may accomplish good.

The plan of treatment for that hydra-headed monster styled puerperal fever, which I shall advocate, has nowhere, so far as my knowledge extends, been fully elaborated in any one essay, and carefully systematized; the various portions of the plan are not yet even generally accepted as orthodox; and many appear at this late date to have paid little attention to them in practice, even if they have seen them in print.

In support of these assertions I will refer to these two facts. In the year 1879, at a session of the American Gynecological Society in Baltimore, the question of intra-uterine antiseptic injection for the cure of puerperal septicæmia came up for discussion. It received very qualified approval, and, with one exception, if my memory serves me right, I stood alone in its strong and uncompromising advocacy. About a year ago I related, in a society of this city, the history of a bad case of puerperal septicæmia which was, beyond question, saved by the persistent and bold use of intra-uterine injections. This very desultory report was published in some of the medical journals of this city, and after its appearance I received a half-dozen letters from men at a distance in this country, asking how the injections were made, and other questions showing so great a want of famili-

arity with this valuable method that I became convinced that still another exposition of its merits might prove well-timed and useful.

Lastly, I would state that I was, if not the first, at least among the very first, who adopted the use of intra-uterine injections and cutaneous refrigeration, in the very inception of both plans in this country; that I have since then never ceased to urge them as valuable resources upon the numerous practitioners with whom I come in daily contact, as teacher, consultant, and associate; and that, for this reason, I trust my large experience in and present estimate of these methods may prove of some value.

Of all the great benefits which have, within the past quarter of a century, been conferred by the advancing science of medicine, in my opinion, none has been more important and more signal than that relating to the prevention and the cure of the febrile conditions incident to the puerperium. Even before the new era which has recently dawned upon this subject, the personal communicability of these dangerous affections was fully recognized, but it was left for the establishment of the germ theory of disease to render their extreme contagiousness fully appreciated; to impress the facts that, with proper precautions, prevention was within the range of possibility, and that treatment based upon the knowledge thus given us might be made effective, and, to a great degree, certain.

Ever since the days of Hippocrates, pathologists have striven earnestly to elucidate the phenomena of those diseases which developed in consequence of the process of parturition, and produced such lamentable results. Over two thousand years have elapsed since that time, and only now have we passed “out of the darkness into the light” in reference to the matter, for now it does really appear that we are beginning to understand the pathology of that group of affections styled puerperal fever. The views which were, during this long period, at various times advocated and more or less generally adopted, are thus enumerated by Hervieux* in his masterly and exhaustive treatise upon this subject:

The doctrine of suppression of the lochia; the doctrine of metastasis of the milk; the doctrine of inflammation of the uterus and peritonæum; the doctrine of a specific puerperal fever; the doctrine of uterine wounds as we have one after an amputation; the doctrine of a multiplicity of puerperal affections grouped under one common name; the doctrine of puerperal blood-poisoning.

Let us pause here and review the features in the condition of the puerperal woman which render her a prey to so many and dangerous disorders which spring up as consequences of utero-gestation and of parturition.

In the first place, her blood is in a condition of hyperinosis—that is to say, it contains a great excess of fibrin. If it be drawn by the lancet, it presents the buffy coat, upon which our forefathers laid so much stress, in the most marked degree; and from this arise two liabilities—first, a tendency in such blood to form thromboses in the heart and the blood-vessels, and, second, a tendency to prove a most

* Read before the New York Academy of Medicine, December 6, 1883.

* “*Traité clin. et prat. des mal. puerpérales*,” Paris, 1870.

prolific ground for the development of sepsis and zymosis. Measles, scarlatina, and varioloid, which give no very bad prognoses when they excite zymosis in the blood of the non-pregnant woman, commonly produce death when they act upon the blood of pregnancy.

Then the nervous system is in a plus state of sensitiveness and excitability, and influences which are very controllable in the non-puerperal state produce very evil results here. For example, an accumulation of urinary poisons in the blood produces convulsions; an untoward moral influence produces violent mania; and crude ingesta result in severe spasmodic affections in the alimentary canal which, in the same woman when not pregnant, would scarcely have attracted attention.

The local conditions which result from parturition are even more striking. The uterus and other pelvic viscera are, at full term, as fully supplied by lymphatics and lymphatic glands as is shown in this diagram; * and the arteries, veins, nerves, and other tissues of that organ, the vagina, the uterine ligaments, and the peritonæum have all undergone a rapid physiological hypertrophy, which permits of an organ only three inches in length ascending so as to touch the ensiform cartilage.

The uterus about the 280th day of gestation contracts and expels the child; then the placenta and membranes; and then closes its emptied cavity, and rests. Let us suppose that in forty-eight hours after delivery a primipara dies of pneumonia, and that we are allowed to lay open the genital tract and examine it from the fundus uteri downward. Outside all looks well; the uterus is merely much larger than in the non-pregnant state. Within, it presents a very different appearance; the whole endometrium, covered over by the greyish, sloughy-looking decidua vera, presents all over its surface an unhealthy, unclean, and diphtheritic look, although free from exudation. Here and there shreds of membrane, consisting of small portions of the decidua reflexa, which had become adherent, appear, partially detached and somewhat decomposed. At one point the large placental site is seen, raw, irregular, and covered over by minute traces of the placenta and small blood-clots which close the mouths of the uterine sinuses. The odor of the opened uterine cavity, the walls of which are thus covered, is disagreeable. The substances mentioned have for forty-eight hours been dislodging themselves and mingling with the pinkish fluid which pours like an unhealthy sweat from the placental site; constitute what is called the cleansings, or lochial discharge. Upon examining the cervix uteri, we find two or three small rents which pass through the mucous lining and involve to a varying depth the sub-lying parenchyma. In consequence of these injuries, and of absorption through them of the lochial discharge already mentioned, the cervix is swollen and œdematous. As we examine the vagina it will be found that the great distension impressed upon it by the head of the child in its passage to the vulva has in two or three places caused a superficial rupture of the mucous lining of this canal.

We now arrive at the vulva, and here we find several

solutions of continuity which have been effected by the escaping head. The fourchette has been torn through, and this rent has extended through a small portion of the perinæum, and one or two small fissures have occurred in the mucous membrane covering over the ostium vaginæ.

Were we to take some of the lochial discharge from the vagina, after the atmosphere has acted upon it, and, abrading the inside of the finger with a lancet so that it bleeds slightly, apply this freely to the denuded surface, and allow it to become dry there, its irritating character would soon become evidenced by a burning sensation in the part, a smarting extending up the hand, and on the next day signs of a slight local inflammation, with a little lymphangitis, would be noticed. This would probably last only two or three days—merely long enough to demonstrate the fact that the fluid is an irritating one, but not sufficiently poisonous to cause erysipelas or severe angioleucitis.

The natural history of the ordinary local results of human parturition is given in the foregoing sketch. In every case of child-bearing the endometrium is thus incumbered and freed by a process of exfoliation and sloughing; in every case the cervix, vaginal mucous membrane, perinæum, and vulva are, in varying degrees, lacerated; and in every case the offensive fluid, called lochia, poisons these freshly made, unprotected wounds. And yet what are the usual results? Recovery, uniformly, I might say universally, unless some unusual occurrence manifests itself to prevent this happy consummation! Theorizing about the matter, one would suppose that the mortality resulting from such a state of things must be excessive. Here we have a number of recent wounds constantly and unavoidably bathed with a fluid made up of dead and decaying animal tissue in a woman whose blood and nerve states are, with reference to septic disease, like flax prepared for the spark, and who is exhausted by pain, anxiety, loss of blood, and deprivation of sleep. Can one point to any concatenation of circumstances better calculated to insure a bad result? And yet the facts are these: only about one or two in every one hundred parturient women ordinarily die when properly cared for during labor, even in public hospitals.*

Recovery, then, is the very general rule after normal parturition; death the very rare exception. But now and then all this is changed. Some ferment or specific poison gains access to the genital canal and acts as rapidly and as decidedly as a little yeast added to dough. In the latter case, active and immediate fermentation affects the whole mass; in the former a set of striking, alarming, and often fatal phenomena occur, which spread dismay through the lying-in chamber and give an entirely new complexion to the progress of the case. The fact that this unfortunate occurrence has taken place will usually announce itself to the attending physician in this way. He leaves his patient on the morning of the third day cheerful, happy, free from pain, with a pulse of 85, and a temperature of 99°. He is called to her in the latter part of that day and finds that she has had a slight, perhaps a scarcely perceptible, chill; that some pelvic pain has followed it; that the lochia have ceased; that the milk which was just showing itself has disappeared; that

* Here Dr. Thomas showed diagrams, which we omit for lack of space.—EDITOR.

* Tarnier, "Report of Maternité Hospital," Paris.

a severe headache exists; that a look of indescribable anxiety has replaced the happy expression of the morning; that the pulse rate is 130 to the minute, and that the buccal temperature is 104°.

A poisonous element has by some method or other reached the genital tract, as fruitful a field for its activity as a mass of dough is for yeast, and the result is already manifesting itself. Let us suppose that the patient's medical attendant lays the flattering unction to his soul that all this is due to "malaria"; or that he soothes his troubled mind with the hope that it is "milk fever"; or that, recognizing the attack as one of "puerperal septicæmia," or "blood-poisoning of child-bed," the first link in that terrible chain called puerperal fever, he relies upon medicines given by the mouth or rectum, what is usually the course shown as the natural one of the affection? Within a week, or thereabouts, for there is no rule as to this point, parenchymatous metritis, lymphangitis, lymphadenitis, phlebitis, cellulitis, or peritonitis will very probably develop itself, and what was originally merely a septicæmia will merge into one of these affections, and the patient will pass through the perils attendant upon whichever of these pathological states manifests itself as a consequence of the initial lesion.

Sometimes the septic disorder develops puerperal mania, while at other times a septic pleuritis, endocarditis, pneumonitis, pericarditis, or meningitis follows the systemic poisoning, the lymphatics emptying their deadly contents into the thoracic duct, and thus transferring them into the subclavian vein, as Lusk clearly points out. At other times the condition continues one of true and uncomplicated septicæmia to the end, death occurring from coma, or the patient succumbing to exhaustion from hyperpyrexia, which lasts for weeks. What was originally septicæmia, however, as a rule rarely remains so, but generally passes into some other disorder, and very generally into peritonitis, before a fatal termination occurs.

And now comes naturally the question, What is the pathology of that affection styled puerperal fever? An inquiry into the views which prevail among others would evidently require more time than I can possibly allot to it to-night; and yet I am desirous that my answer, even if very short, shall be so clear, succinct, and simple as to convey perfectly the opinion which a practice of thirty years has impressed upon my own mind concerning a subject which has always deeply interested me, and in connection with which I have had abundant opportunity for study, both at the bedside and in the dead-house.

My observations have led me to adopt the views of those who believe that *puerperal fever is puerperal septicæmia*. It matters not whether it assume the form of metritis, phlebitis, cellulitis, peritonitis, or lymphangitis, the essence of the disorder is a poison, which is absorbed into the blood of the parturient woman through some solution of continuity, and which, in the appropriate soil of the puerperal condition, fructifies and produces the result known in its *ensemble* of pathological phenomena as puerperal fever. From my stand-point, the matter is well stated by Lusk* when he declares that "it has now passed beyond the domain

of dispute that puerperal fever is an infectious disease, due, as a rule, to the septic inoculation of the wounds which result from the separation of the decidua and the passage of the child through the genital canal in the act of parturition."

As early as 1870, Hervieux, in his work on the diseases of child-bed, already alluded to, expressed himself upon this point in the following words: "Here I stand; if what I have said does not carry conviction of the truth of my doctrine, fuller explanation will fail to do so. I believe in the multiplicity of puerperal diseases. I believe in puerperal poisoning as the source of them. Here, in two words, my creed is presented."

In 1877 the Berlin Obstetrical Society appointed a committee on puerperal fever, consisting of Schröder, Löhlein, A. Martin, Fasbender, and Boehr—men whose names are sufficient to command attention, even if their words fail to carry conviction. In its report this committee expresses its views thus: * "Under the names 'puerperal fever,' 'malignant child-bed fever,' are included a group of diseases occurring in child-bed which vary very greatly in their manifestations, but have this in common, that they are called into being by the absorption from the organs of generation of a material which gives rise to destructive inflammation and fever. There are, indeed, a number of substances, mainly composed of organic materials in a state of putrid decomposition, which, when brought into contact with an open wound, set up inflammation in it, which extends to the neighboring tissues; a further absorption by the lymphatics and blood-vessels leads to more extensive inflammation among neighboring and remote organs; and, when a large quantity is rapidly absorbed into the blood, a quickly fatal poisoning of the whole organism occurs. To surgeons the deadly effect of these materials upon wounds is only too well known, and the greatest advance, probably, which surgery has ever made consists in the so-called antiseptic method of treating wounds—that is, in the scrupulously exact removal of such materials from fresh wounds.

"Puerperal fever is indeed nothing else than the infecting of fresh wounds, such as are found in every newly delivered woman, with these destructive septic materials. Almost every woman, after labor, has small wounds on the external genital organs, which are caused by the passage of the child through this narrow opening, and in every newly delivered woman the inner surface of the uterus, from which the protecting membrane has been cast off with the ovum, presents a large wound surface. Thus, every newly delivered woman is liable to suffer from the dreaded infective wound diseases, which, in persons wounded under other circumstances, are called pyæmia, septicæmia, wound-fever, blood-poisoning, purulent infection, etc., *so soon as suitable septic materials are brought into contact with the genital organs.*"

And now a few words upon the nomenclature of this disease, which for so long has been known under the names of puerperal fever, child-bed fever, lying-in fever, and the names of the various special affections which develop in its course—phlebitis, lymphangitis, etc. Of late an effort has been made, which I think has emanated from that school of

* "Midwifery," p. 608.

* "Report of Puerperal Fever Committee of Berlin Obstetrical Society," December 4, 1877, p. 9.

obstetrics which has shed so much luster upon our art, and enriched with so many eminent names the obstetric register of the world—the Dublin school. By members of this it has been urged that the name metria should supplant that of puerperal fever.

I for one sincerely trust that the suggestion will never be adopted. In what is the new name better than the old and faulty term? Does it convey any more accurate pathological facts to the minds of the student? Does metria exclude any chance of error as to pathology, or advance the clearness of understanding in any wise? I think not. Of the two terms it appears to me that, while both are objectionable, metria is the more so.

On the other hand, puerperal septicæmia conveys to the student and to the practitioner a clear and definite idea, which appears to be in consonance with the truth as taught us by modern pathology. In spite of the fact that important complications commonly result from the initial lesion, it appears to me that the influence of this is so paramount that its title should be adopted in spite of the fact that it is far from being absolutely perfect.

I should willingly, for the present, accept the reservation offered by Dr. Robert Barnes,* when he says: "I would propose that the word should not assume that a distinct, specific poison, or sepsis alone, is concerned, but that it should be used comprehensively as a general term, implying that the blood of the puerpera is empoisoned"; and this although I do believe in the existence of a specific poison, which is the great factor, as surely as I believe in such a factor in the production of typhus or variola.

What is the nature of this subtle and deadly poison, which, entering like a ferment into the genital canal of the puerperal woman whose blood is hyperinosed, whose nerves are in a condition of hyperæsthesia, whose utero-placental vessels are partially open, whose cervix uteri, vagina, and vulva are covered with fresh superficial wounds, and whose womb is pouring slowly forth a fluid composed of dead tissue, decomposed blood, and recently exfoliated cells, gives rise to so much disturbance? What do we know of the poison? what is its natural history? what encourages its life? and what kills it, or cripples its activity?

Unfortunately, these questions can not to-day be satisfactorily answered; but have such questions been any more satisfactorily answered with reference to scarlatina, measles, and variella? German pathologists have proved that the presence of micrococci, more especially of the round bacteria, occurs so frequently in the pathological products of puerperal diseases as to lead to the conviction that they are important factors in reference to them; but this point, like many others connected with the influence of bacteria as morbid agents, is yet too unsettled for admission into a practical treatise like the present.† Inquiry into the matter is now being pushed with vigor in the laboratories of France and Germany, and we have, according to recent reports, a fair prospect of valuable and practical results.

But, even although we do not at present know the exact nature of the poison which proves the disturbing element in these cases, we surely know that some such toxic agent exists, and it behooves us to learn how to prevent its entrance into the genital tract, and how best to destroy its life or its activity if it should gain admission in spite of our care and watchfulness.

Whatever be the character of this agent, we know that there are *two, and only two*, methods by which it can reach the parturient tract and exert its baneful influence. First, it may be carried to the vulva and into the vagina through the open orifice of that canal by the atmosphere, in which it floats as an impalpable substance; and, second, it may be carried to any part of the genital tract by the fingers of doctor or nurse; by towels or cloths laid against the vulva; by sponges used in washing; by instruments used in the delivery of the child, drawing of urine, or injecting the vagina; and from the bed-clothing and body-clothing of the patient which are in immediate contact with the sexual organs.

As this paper is already assuming proportions greater than those which I originally prescribed for it, I shall deal with this part of my subject rather dogmatically, offering a number of propositions which will embody in a few sentences what would otherwise demand a great deal of space for its enunciation. I shall address my remarks chiefly to the management of cases of midwifery occurring in private practice, as the wards of hospitals have long been subjected to systematic rules, while my observation in the capacity of consulting physician positively convinces me that in private practice, even among the wealthy who can command every safeguard and procure every luxury, there exist a want of system and an apathy as to preventive measures which border very closely upon criminality. To-day, when it is so generally agreed among the ablest obstetricians of the world that puerperal fever is the result of a special poison, and that prophylaxis against this is, by close attention to very simple details, perfectly practicable; it is the duty of every practitioner to guard his patient against danger by every means in his power. If he accept the views which this paper adopts, his duty is clear; it is equally incumbent upon him to give his patient the benefit of the doubt if he reject them.

Prophylactic measures which should be adopted in all midwifery cases, whether they occur in hospital or in private practice:

1. The room in which the confinement is to take place should have the floor, walls, and furniture thoroughly washed with a ten-per-cent. solution of carbolic acid or mercuric bichloride, 1 to 1,000, and the bedstead and mattresses should be sponged with the same solution. Curtains, carpets, and upholstered furniture should be dispensed with as far as possible.

2. The nurse and physician should take care that all their clothing, both under and upper, be clean and free from exposure to the effluvia of any septic affection. Should either of them have been exposed within a fortnight to the effluvia of such affections as scarlet fever, typhus, erysipelas, septicæmia, or the like, they should change every article of

* Lecture in "Am. Jour. of Obstetrics," January, 1882.

† In reference to this part of our subject I would refer those interested to the chapter upon it by Professor Lusk, in his masterly book upon the "Science and Art of Midwifery."

clothing and bathe the entire body, especially the hair and beard, with a reliable antiseptic solution; that which I prefer for this purpose is a saturated solution of boric acid.

3. As labor sets in, the nurse, having thoroughly washed her hands, cleaned her nails with a stiff nail-brush, and soaked them in antiseptic fluid, should administer to the patient a warm vaginal injection of antiseptic character; bathe the vulva and surrounding parts freely with the same; repeat this every four hours during labor; and keep a napkin, wrung out of the warm antiseptic fluid, over the genital organs until the birth of the child.

4. Before assuming the functions of their respective offices at the moment of labor, both doctor and nurse should wash the hands thoroughly with soap and water, scrub the nails with a stiff nail-brush, and soak the hands for several minutes in a bichloride solution, 1 to 1,000.

5. The first two stages of the labor having been accomplished, the third stage should be efficiently produced; all portions of placenta and membranes removed; and ergot administered, in moderate dose, three times a day, and kept up for at least a week, for the complete closure of the uterine cavity, expulsion of clots, and occlusion of the uteroplacental vessels.

6. The doctor, taking nothing for granted, not satisfying himself with a vague report of the nurse, should, at the conclusion of the labor, carefully examine the vulva of the patient. If the perinæum be lacerated, it should be closed at once by suture, to shut up this avenue to septic absorption; and, should slight solutions of continuity be found in the labia or the vulvar extremity of the vagina, these should be dried by pressure of a linen cloth, touched with equal parts of sol. ferri persulph. and carbolic acid, again dried thoroughly by pressure with the cloth, and then painted over with gutta-percha collodion. If this be thoroughly done, absorption will be prevented at these points for at least three or four days, when the application may be repeated.

7. In six or eight hours after the labor, when the patient has rested, the vagina should be syringed out with an antiseptic solution, and a suppository of cocoa butter, containing from three to five grains of iodoform, should be placed within it, under the os uteri. A syringe with intermittent jet should be used, which will wash away with gentle force all blood-clots, and reliance should not be placed upon the feeble drip of the fountain syringe, the advantages of which are, I think, entirely theoretical.

8. These vaginal injections and suppositories should, in cases of normal labor, be repeated every eight hours; in cases of difficult or instrumental labors, twice as often; and they should be kept up for at least ten days, the nurse observing to the last the precaution already mentioned of washing her hands before every approach to the genital tract of the patient.

9. When catheterization becomes necessary, it is safer to employ a new gum-elastic catheter, which before use should be thoroughly immersed in antiseptic fluid, and which should be destroyed at the conclusion of the case, rather than to trust to the nurse's cleansing of an old silver instrument which bears within it the register of a list of cases of septiciæmia in which she has employed it during the past

two or three years. *It is a very common and very bad habit for nurses to own silver catheters, which they carry about with them from case to case of midwifery.*

10. Last, but by no means least, let the physician inform himself by personal observation as to the competency of the nurse to syringe out the vagina thoroughly, to place the antiseptic suppositories just where they should be, and to use the catheter without injury to the patient. Neglect of this precaution has frequently resulted in leaving a fœtid upper segment of the vagina entirely unwashed, while the antiseptic stream was limited to the lower third of the canal.

In a case in which I had performed anterior colporrhaphy and perineorrhaphy at the same time, in private practice, I was forced to withdraw my sutures and sacrifice the operations on account of a sudden rise of temperature to 105°. As I had become alarmed about the patient, I then used the syringe myself, and, to my great surprise and regret, found the upper portion of the vaginal canal filled with a decomposed mass of blood, which the constant but inefficient injections of the nurse had failed to remove.

Even if every suggestion made here be faithfully followed out in every case of labor which one attends in private practice, the trouble involved in the plan will not be great; and it will fall into utter insignificance when measured with the great comfort which will come to the mind of the obstetrician from the reflection that he has fully done his duty in exerting himself to the utmost to protect the vital interests which have been intrusted to his care. This feeling, which would be pleasant if no untoward event occurred, would be tenfold more so if a fatal issue should give rise to the painful inquiry as to his having fully acquitted himself of his duty in respect to prophylaxis. In the past this unpleasant question has not been often raised, but, as society at large becomes more thoroughly informed upon the prolific subject of the germ theory of disease, it appears to me that he will stand firmest who can point to a clear record of strict attention to preventive medicine.

It is clear that all this will make of the process of parturition in the future a more important event than it has been regarded in the past, and she who is about to bring forth will be treated as one about to go through the perils of a capital operation. This is just what I think ought to take place, and, when it does so, thousands of valuable lives which are now lost will be saved, and thousands of desolate households will be spared the sorrow of losing their female heads.

I am fully aware that, at the conclusion of this paper, more than one speaker will arise and declare that his experience of many years of large midwifery practice, with scarcely any deaths, convinces him that all these precautions are unnecessary, that the process of parturition must have changed its character, or that this magnifying the perils of a simple physiological process is a work of pure supererogation, which will have its day, and then for ever pass away. I will simply say in advance to these speakers that I don't agree with them, and then quote the language of the Puerperal Fever Committee of the Berlin Obstetrical Society, in pressing the preventive measures of antiseptic surgery upon the Prussian government.

* "We shall not attempt to portray, from a humanitarian point of view, the anguish which falls upon the numerous families, where the wife and mother, who but just now was radiant with the full bloom of health, has been carried off, just as the family has been increased by a new member, still utterly helpless and dependent upon a mother's care; nor shall we point out what injury is done to the national life of the state by the yearly death of thousands of mothers, and the ruin of thousands of families caused thereby. We may fitly compare the manner in which puerperal fever finds its victims in a definite class of persons, with the losses which are entailed by a great war. Just as, in the latter case, the losses fall exclusively upon the young and vigorous male population, so in the former is the most valuable part of our female youth carried off by puerperal fever; nay, more, the loss which the family and the state suffer in consequence of puerperal fever is more acutely felt than that which in general accompanies war, because the latter concerns usually the unmarried and only just full-grown young men. The loss of an entire battalion of *Landwehr* is the only one which can be fittingly compared, in the severity of its results and the intensity of distress which it causes, with the ruin which puerperal fever brings with it."

Before leaving this part of my subject, let me in the strongest manner record my protest against the use of intra-uterine injections as a prophylactic measure, except after very severe operations within the uterine cavity, which render the occurrence of septicæmia almost certain. As a preventive measure, to be uniformly adopted, I look upon it as to the last degree rash and reprehensible. The use of a dangerous remedy in combating the results of a dangerous disorder is always admissible, but a resort to a hazardous procedure for a condition in connection with which danger has not shown itself, and may not do so, should be viewed in quite a contrary light.

Treatment of Puerperal Septicæmia.

Let us now suppose that, in spite of every precaution, the specific poison has gained entrance at one of the numerous door-ways left open in the genital tract between the vulva and the fundus uteri; what are the most reliable means now known to us for checking the advance of the septic disorders which are set up in consequence?

But let me stop here, before answering the question just asked, and explain what I mean by the use of the term specific poison. I do not believe that there is, necessarily, any specific disease germ which gives rise to *puerperal* septicæmia! It is probably the same germ as that which is the source of septicæmia, phlebitis, and lymphangitis in the stump after an amputation, in the wound created by a compound fracture, or in the lacerated tract produced by a gunshot. But the pathological condition excited appears to me to be entirely different from that putrid absorption which results from the decomposition of a retained placenta, or a putrid mass of blood. Such decomposition produces a toxæmia, violent and dangerous it is true, but which disappears as soon as the offending mass is removed. That of the true puerperal disease at once, or almost at once, dis-

eases the lymphatics and sets up an action which often proves uncontrollable. *If the mere presence of decaying animal material in a uterus would produce puerperal septicæmia without the agency of a specific disease germ, we should surely have that affection developing in healthy country localities where the women are attended by ignorant midwives, but where, nevertheless, it is almost an unknown disorder.*

"I," says Hervieux, "who write these lines, declare that in my own country I have within the space of three years attended one thousand cases of labor, and out of that number have lost only one patient!"

And now, in summing up what I esteem the most certain and the most rational treatment of the disease styled puerperal fever, I will be as concise as possible.

As soon as the patient is stricken by the poison, certain very marked phenomena usually develop themselves with great promptness. After a chill or a slight horripilation she is affected by a high temperature, pelvic pain, considerable mental perturbation, headache, pain in the back, and sometimes, though not commonly, by nausea and vomiting. We will assume, first, that the attack is a severe one in its inception; and, second, that the patient is in such a position in life that we are not in any way hampered in our efforts to save her by considerations of economy. Having considered treatment from these standpoints, it will, of course, be easy to modify the plan so as to meet the requirements of a mild attack or of a scanty purse.

As the practitioner sits by the bedside of his patient at the commencement of her attack, he is aware that there are points connected with its true pathology which he can not yet determine. For example, he can not say whether the case is going to assume the form of septicæmia lymphatica or septicæmia venosa; whether of perimetritis or parametritis; or whether thrombosis of some of the large pelvic or utero-ovarian vessels or a true parenchymatous metritis is to play the most active part in the siege which has begun. If he fritter away the golden moments in vague speculation; if he soothe his fears by hoping that the attack is due to malaria or milk fever; or, if he cast aside the rational doctrines of to-day in favor of the idea of a general infectious and particular form of disease called by the forefathers of the French school "*la fièvre des femmes en couche*," time will be lost which can never be regained. If, on the other hand, he is encouraged by his clinical observation to stand with many of the best pathologists and practitioners of our time in the position assumed by Hervieux—"I believe in the multiplicity of the affections classed under the head of puerperal fever; I believe in puerperal poisoning as the source of them"—he will act at once and strike at the poison before it has fairly gained a foothold. In other words, if the physician could see into the future and learn with certainty that peritonitis, cellulitis, thrombosis, lymphangitis, or true phlebitis is to be the final disorder, he should, if he reaches the case at the inception of the attack, follow, in my opinion, the course here formulated:

1. As soon as a diagnosis of septicæmia is determined upon, all pain, nervous perturbation, shock, and mental anxiety should be quieted by the hypodermic administration of ten minims of Magendie's solution of morphine, un-

* *Op. cit.*, p. 8.

less some special and very decided idiosyncrasy with reference to opium be ascertained to exist; and throughout the severity of the attack, whenever suffering of mind or body occurs (perhaps it will be about once in every six or eight hours), this should be repeated. In my experience, no other method of administering morphine in these particular cases compares with this, and, as it is not to be continued long, there is no fear of causing the patient to become addicted to the drug as a vice. If a small, sharp, and *new* needle be used, if it be thoroughly cleansed with soap and water before each time of using, and be dipped in a solution of bichloride, 1 to 1,000 of water, just before each insertion, no abscesses will occur. It is the large, rusty, unwashed, and unpurified needle, which the doctor's economy makes last him for many months, which so commonly results in them.

2. The physician must now decide whether, in his opinion, the septic disease which is developing has originated in the wounds situated between the os internum uteri and the vulva, or in the endometrium, above the former point. If he decide in favor of the former view, he should persist, for a time longer, in the more thorough use of vaginal injections; if of the latter, intrauterine injections should be at once resorted to. Usually the question has to be decided by the efficacy or inefficacy of frequent germicide vaginal injections in bringing down the temperature and controlling other grave symptoms. Should a failure of these seem to prove that the origin of the disease is higher up the genital tract, more decided and radical measures must be taken.

The patient having been entirely relieved of pain and thoroughly quieted, the first injection should be practiced in this way: An India-rubber cloth should quietly, without hurry, noise, or disturbance on the part of the nurse, be spread over the edge of the bed on which she lies, and made to fall into a tub of warm water rendered antiseptic by the addition of 2 or $2\frac{1}{2}$ per cent. of carbolic acid, or of the bichloride of mercury, 1 to 2,000, or of some other reliable germicide. Then Chamberlain's glass uterine tube, which I here show, or the very excellent and ingenious tube invented by Dr. George H. Lyman, which is here seen, thoroughly fitted to a Davidson's or Higginson's syringe, should be immersed in the tub. The nurse now aiding the patient by the shoulders, and the doctor by the hips, she should be gently laid across the bed and be made comfortable with a pillow under the head. Each foot should rest upon a chair placed at either side of the tub, and she should be entirely covered over with a couple of blankets. The doctor, now placing himself between the knees of the patient, should take the tube in his right hand, while a stream of water is made to flow through it by the nurse, who squeezes the syringe bulb; and he should pass it gently up to the fundus of the uterus. The stream of water, which has been steadily flowing, is now projected with gentle force against the walls of the uterus, washing away adherent blood-clots, detaching portions of hanging membrane, and everywhere neutralizing the influence of the poison which has excited the disorder.

After the first injection, the position of the patient need

not be disturbed, but the injections may be given as she lies upon a bed-pan.

In some cases, in which I have had reason to suspect that portions of the placenta or membranes have been retained, I have chloroformed the patient, passed the hand, rendered thoroughly aseptic, within the cavity, and very gently scraped off adherent masses from the uterine walls, using the nails as a curette, as Wilson, of Baltimore, has advised. In some other cases I have rubbed the whole endometrium with an aseptic sponge, held in a long sponge-holder, or employed the largest of my curettes, to remove clots and adherent secundines, with great apparent advantage.

That the use of antiseptic uterine injections after parturition is attended by danger is beyond question. The greatest hazard attending this plan is the entrance of air into the uterine cavity; the next, the production of hæmorrhage by detaching some of the thrombi which fill the mouths of the uterine sinuses; the third, the danger of forcing the fluid used as an antiseptic directly into the general circulation, through the introduction of the tube into the mouth of a sinus; the fourth, the creation of convulsions, violent pain, or nervous prostration, by a sudden and baneful influence upon the nervous system; and the fifth, the passage of the tube into a Fallopian canal, and the injection of fluid directly into the peritoneal cavity, as in a case reported by Dr. W. Gill Wylie in an interesting paper in the "New York Medical Journal" for June 23, 1883, p. 679.

All these dangers may be, to a great extent, avoided by care as to details: by using a large injecting tube which can not enter an open-mouthed sinus; by using water warmed to 105° ; by injecting the fluid through the tube so as to exclude air before passing this up to the os uteri; by using only a moderate degree of force in throwing the jet against the uterine walls; and by proceeding with the whole affair gently, cautiously, slowly, and intelligently.

The tube should never be allowed to fill the os uteri completely, so as to prevent the escape of the injected fluid. Should the cervical canal be so narrow as to hug the tube closely, it should be dilated by dilators of hard rubber, by the fingers, or by Barnes's bags, before the injection is practiced.

A solution of the persulphate of iron should always be at hand in case of sudden hæmorrhage from displacement of a thrombus. Should this accident occur, ergot should be immediately given hypodermically, the iron solution be at once added to the antiseptic solution and allowed to pass into the uterus, and pressure be made upon the fundus so as to stimulate the contraction of uterine fiber to accomplish closure of the open sinuses in that way.

Quite a number of cases of death from this plan of treatment are on record. In a very large experience with it I have met with but one. The whole number on record would, however, fall, I think, into insignificance if weighed in the balance against the many deaths which have been due to a neglect of the means, or against those lives which have been saved by it.

After all, the question as to the dangers attending a plan of treatment are not to be settled upon mere abstract reason-

ing. The evil which it is known to do must be weighed in one scale, and the good which it effects in another; and careful consideration must decide whether we are justified in accepting the former for the sake of the latter. Judged in this manner, I feel very sure that intra-uterine injections for puerperal septicaemia deserve a place among the most valuable resources for the saving of life for which we are indebted to modern pathology.

The frequency of these intra-uterine injections should vary greatly with individual cases. In mild cases of septicaemia, where the temperature comes readily down after the uterus has been washed out, and rises very slowly, they need only be used once in every five hours; in other cases they become necessary once in every three hours; and in bad cases they are required once every hour. These injections should always be administered by a physician, should always be carried fully up to the fundus uteri, and should always be used with every regard to caution as to detail which has been already mentioned.

Many prefer the use of those syringes which allow of a steady flow of a stream of water, propelled by gravitation, as is the case with the so-called fountain syringe, which is so popular among us. This is partly because greater safety is supposed to attach to these, and partly from a theory that danger attends the propulsion of a stream by intermittent jet against the uterine walls. For a number of years I shared this belief, but experience has taught me that a gentle projection of the fluid is an advantage, that by this means a more thorough cleansing is accomplished, and that with due caution no more danger attends the plan than that by the steady flow.

Some have adopted continuous irrigation of the uterine cavity, but this is, I feel perfectly certain, a delusion and a snare. It gives the appearance of great thoroughness, which it does not possess, for the reason that by this plan it is very difficult to bring the germicide fluid into full contact with the entire endometrium. For vaginal irrigation it is an excellent method, but I have seen it allow the temperature to remain high when applied to the uterine cavity, and have replaced it by the intermittent douche, used only as often as every three hours, with striking results. Nevertheless, in very severe cases I prefer to employ continuous irrigation, replacing its use every third hour by that of the intermittent current; rather than exhaust my patient by half-hour disturbances and injections, as has been by some advised.

After all that has been said on this subject, the essential fact is this: that plan is best which accomplishes most perfectly the cleansing of the parturient canal. With ordinary precautions, danger need not necessarily attach to any method.

3. The uterus having now been thoroughly cleansed, and the patient entirely quieted, attention should be turned to controlling the temperature, which, in septicaemia of puerperal character, runs so high and maintains itself at so exalted a range as to constitute one of the immediate factors of a fatal issue. Even if this were not the case, the patient's strength is so much exhausted by prolonged high temperature, her nerve power so much depreciated, her

blood-state so rapidly injured, and her comfort so decidedly interfered with, that these considerations alone would point to the propriety of combating hyperpyrexia. For this purpose I formerly relied upon the affusion of cold, or tepid water, the patient lying upon Kibbee's cot; at present I accomplish the same result more easily and more pleasantly for the patient by the use of Chamberlain's rubber-tube coil, which I here show. A mat, composed of a rubber tube rolled upon itself in a circle, covers the whole abdomen from the ensiform cartilage to the symphysis pubis; the upper end of the tube which makes this mat is anchored by a weight in a tub of ice-water, placed about three feet above the level of the patient, and the lower end falls into a tub upon the floor. By siphon action the water of the elevated tub runs through the tube which constitutes the mat, and collects in the receptacle on the floor. By this means a temperature of 104° can very readily, as a rule, for there are exceptions to the rule, be kept at 100° for weeks together.

Unfortunately, there are almost insurmountable difficulties connected with the use of this invaluable method in the minds of the patient's friends, the patient herself, the nurse, and alas, too often, the attending physician. You are told that the patient becomes chilled, that the coil prevents her resting, that the temperature absolutely goes up under its use, and descends whenever it is left off; and by the doctor you are apt to be informed that his fear of resulting pleurisy, bronchitis, or pneumonia is very great.

I will merely say, in refutation of these charges, that in my service in the Woman's Hospital, where convalescents from laparotomy are constantly under treatment in large numbers, this means of controlling temperature is as commonly and as freely in use as poultices are in general hospitals, or gargles in dispensaries for diseases of the throat. We never meet with any of these difficulties, and very rarely with failures as to the desired result, and I believe that I am correct in saying that successive house-staffs, whose duty it has been to carry out the plan, have thus far had, to a man, the most implicit faith in its beneficial agency.

There are some peculiarities about it, however, which I must mention. Very often the coil will not succeed in controlling the temperature for twenty-four hours; its prolonged use alone develops and illustrates its great benefits; and removing it from the body for an hour at a time damages its influence very much. I have never seen evil result from the chilliness which it excites, if hot bottles be kept at the soles of the feet, and in not one instance, out of hundreds of cases, have I seen pneumonia or pleurisy excited by it.

4. The nervous system should be so kept under the influence of febrifuge medicines as to keep under control the tendency to chill and pyrexia. For this purpose, fifteen grains of the sulphate of quinine should be given in capsule or by suppository night and morning, or, in place of this, two capsules may be given night and morning of Warburg's tincture, in the form of solid extract, as advised by Dr. J. T. Metcalfe. Lastly, to the same end the salicylate of sodium may be employed.

5. The patient's diet should consist entirely of fluid food,

given often and in small amounts. The staple article should be milk, but animal broths and gruels may be alternated with it with advantage.

6. At the very commencement of such a case the attending physician should, in the patient's interest, surround himself with efficient and abundant assistance. If he undertake to wash out the uterus every four or five hours without other assistance than that of the nurse; and if the patient is to rely for the constant attention and care, which she will inevitably require, upon one nurse, it is needless to point out that the duty of both doctor and nurse—vital duties, be it remembered—will be but half performed. And, unfortunately, the penalty will fall upon the patient and her friends.

For a case of puerperal septicaemia to be properly treated in private practice by the plan here advocated, it is necessary for the attending physician to associate with himself some young practitioner, who has the time to devote to the case, and the intelligence to use the uterine douche safely and efficiently. Furthermore, two nurses are necessary: one to be in charge for twelve hours, and the other then to relieve and replace her for an equal time. Without the rest and sleep thus afforded, no nurse taking charge of such exacting cases as these can possibly do her duty in such a way as to subserve the patient's interest. As a rule, the nurse will begin with the declaration that she is competent and willing to take entire charge; that she is one of those people who can do without sleep, etc.; and her heroic offers of self-sacrifice are hailed with enthusiasm by the terrified family. To believe in, and to act upon, this would be very foolish and very dangerous. After three nights of watching, this same nurse would snore through the hours in which her patient needed her, give the wrong medicines, mislead the doctor, allow the bladder to become distended with urine, and fail in every requirement of the occasion.

If the patient can not bear the great expense attendant upon the extra service which I have mentioned, it is her misfortune; and for such as herself the doors of our hospitals are open. There is no case of ovariectomy in the Woman's Hospital, however poor the patient be, upon which, thanks to the generous arrangements of its managers, just such attendance as I have mentioned is not lavished.

The antiseptics which have heretofore been tried under these circumstances are thymol, boric acid, salicylic acid, carbolic acid, and mercuric bichloride. Of these, all have disappeared before the superior merits of the last two; and carbolic acid, which for so long a time has been almost supreme, appears about to be abolished in favor of the bichloride of mercury, 1 part to 1,000 or 2,000 of water. For all antiseptic purposes outside of the uterus, the bichloride is now, owing to the carefully made and important investigations of Koch, very generally employed in the strength of 1 to 1,000, and the uterus has now been washed out with this excellent germicide, 1 to 2,000, often enough to make us regard its use as an intra-uterine injection as entirely warrantable. If carbolic acid be used in that way, it will not be safe to carry its strength beyond a two-, or, at most, a two-and-a-half-per-cent. solution.

THE SO-CALLED PINK EYE AND HORSE SCARLET FEVER.

By JOHN C. PETERS, M. D.,
NEW YORK.

SOME years ago I met with allusions to scarlet fever in horses in some French medical journals which arrested my attention, and, as I was then engaged in attempting to improve the sanitary condition of stables in this city, I at once made inquiries about the matter in some of the large livery, ear, omnibus, and sales stables. An epidemic of so-called "pink eye" was then prevailing. I had seen the disease before. Almost all horsemen agreed that this distemper had many varieties, but was not infectious or contagious, and was generally produced by exposure to cold and wet, aided by some peculiar "constitution of the air" and bad condition of the stables, which predisposed to epidemic disease. It was thought to be a catarrhal-rheumatic affection, but I was struck with the degree of sore throat which existed, in some cases in connection with swelling of the glands of the neck, rheumatism, and dropsy of the legs. I did not then know how to look for the eruption upon the skin, or in the nostrils, mouth, and throat. I was told that almost every affection of the nostrils and throat in horses was apt to be attended with swelling, and even abscess of the glands of the neck, while the exposure of the backs of horses to cold and wet was so often followed by renal troubles and dropsy of the legs that no diagnosis of scarlatina could be based upon any or all of these indications. These explanations seemed so satisfactory that I did not examine the works of the English and American veterinary writers, but let the whole matter drop until Dr. Stieckler's article appeared in the "Medical Record" of March 24th of this year, 1883.

I then looked over all the books on veterinary medicine in the Astor, New York Hospital, and Academy of Medicine libraries, and found almost overwhelming testimony as to the existence of scarlet fever among horses, commencing with Percival's account in 1834. It is well to state here that Percival's work on hippopathology is still read at the present day with almost as much interest and profit as Sir Thomas Watson's "Principles and Practice of Medicine," first published in 1836-'37. Percival was also one of the first editors of the London journal of veterinary medicine ("The Veterinarian"), which is continued to the present day. Percival was followed by Surgeon Haycock, Edinburgh, 1850; James White, London, 1851; by Copland in the "Medical Encyclopædia," 1859; Dadd, "Modern Horse Doctor," 1866; by Armitage; and ultimately by Williams, of Edinburgh, 1876; and Robertson, of London, in July, 1883. I also looked over Fleming on "Animal Plagues"; Basham and Webster on "Epidemics"; Theophilus Thoupson on the "Annals of Influenza"; Hecker's "Epidemics of the Middle Ages"; and the whole series of the "Veterinarian," from 1830 to 1833.

These researches convinced me that various diseases of animals, communicable to man, and *vice versa*, had prevailed again and again; among them angina maligna, undoubted diphtheria, and both scarlatina and true measles, and, in all probability, that hybrid of the two diseases which is so well

described in Aitkins's "Science and Art of Medicine," vol. i, p. 345.

I then commenced my researches anew for the discovery of scarlet fever among horses in this city. The surgeon of the Fourth Avenue stables told me that he had had cases which he would have liked to submit to the examination of experts, but knew not where to apply. The Third Avenue car stables, with two thousand horses, is under the care of a homœopathic veterinary surgeon, who is familiar with the disease, and referred me to a short but excellent description of scarlatina in horses in Pulte's "Manual." The foreman and physician of the Sixth Avenue car stables had been acquainted with scarlet fever in horses since 1869, when he was instructed in its diagnosis by the late Dr. Copeman, a veterinary surgeon of good repute at that time: he had had three cases quite lately. Several of the proprietors and surgeons of the large sales stables were conversant with a disease marked by inflammation of the eyes, nose, and throat, and with an eruption upon the skin which they were in the habit of calling measles, as it resembled a similar disease which they had seen in their own children. It differed from ordinary colds, catarrhs, and influenzas; and, when their attention was called to the frequency with which glandular swellings and dropsy attended the disorder, they were quite willing to admit that some of the cases might have been scarlet fever, or a hybrid of measles and scarlet fever.

Professor Leautard had seen but few cases during the last twenty-two years, and then only in the purpuric form, which he doubted being true scarlet fever. Professor Bates, of the Columbia Veterinary College, was familiar with it in its true, undoubted, and uncomplicated form, and not only loaned me many books, but referred me to Dr. F. Walton, who wrote out a description of it for me, from his own experience with it, as follows:

DEAR DOCTOR: I have observed equine scarlatina in stables especially along the river fronts, more particularly during the prevalence of the disease known as "pink eye." This name covers multitudes of ignorances, and is applied to several different morbid conditions, but I have thought that some of them were epidemics of pure scarlatina. In that variety of pink eye to which I have given the name of equine scarlatina the onset is sudden, the invasion being characterized by much prostration, and a temperature running up rapidly until the fifth or sixth day, varying from 104° to 106°, and even 107° F. *It is certainly contagious*, for other animals fall sick in the stables within four days after the first appearance of a case in a previously unaffected building; and I have noticed that those animals which have already had the disease do not succumb to it a second time. There is an *eruption* on the skin, which in some animals only looks like an erythema, or congestion; but the mucous membranes of the eyes, nose, mouth, tongue, and throat are covered with a distinctly characteristic red (or scarlet) rash, generally confluent, but often punctate, and sometimes blotched. There is a free catarrhal secretion from the nose and eyes, but finally the mucous surfaces of the mouth, tongue, and fauces peel off, leaving a red, raw-looking surface (like the strawberry tongue of scarlet fever). The fever continues till the fifth or sixth day, then gradually subsides, and generally wholly disappears by the ninth to the eleventh day. Sequelæ are apt to appear within ten days to three weeks, marked by dropsical swellings frequently, when albuminous urine is almost invariably

present. Sometimes we have a general rheumatic joint affection, which finally disappears spontaneously. Subacute pleurisy is the worst complication or sequel. In one case I had a decided otitis media, followed by total deafness. Young horses take the disease more frequently than older animals, although the latter are not always exempt. The trouble is self-limited, and frequently mild, so that palliative treatment is all that is required. Through the kindness of Dr. W. Oliver Moore, a committee man, I obtained the opinion of Dr. R. W. Finlay, of Harlem, who had observed about six hundred cases of "pink eye," in stable parlance, or equine scarlatina. He says: "The urine is scanty and slightly albuminous on the second day, in many cases, and the temperature rises to 103° to 104° F., with slight dropsical symptoms. On the third day (scarlet) petechial spots are visible on the nasal mucous membrane; the pulse is 60 to 80 per minute, 40 being normal in the horse; temperature 104° to 106°; with tenderness of the glands, and difficulty of swallowing, so that very little food can be taken. On the fourth day the dropsical swellings have increased, and the temperature rises to 107°, or even 108°. On the fifth and sixth days the spots on the mucous membranes are of a deeper hue, the urine highly albuminous in some cases, and tinged with blood in a few. On the seventh day improvement generally commences with a slight desquamation beginning in the ears, but the disorder seems most contagious then. Adenitis, when present, usually shows itself between the ninth and fourteenth days, and is attended with the usual signs of pus forming in glandular structures."

In the London "Veterinarian" for September of this year I have found an article on pink eye, by the veterinary surgeon of Burdett-Coutts, Esq., which not only says, but proves, that it is contagious and generally attended with an *eruption* of the skin, usually on the quarters; that crescentic and moniliform bacilli are found in the blood and secretions; and that inoculations with the blood, tears, and nasal mucus have reproduced the disease. Pink eye was thus conveyed from a partly blooded horse to a cart-horse; from that to Guinea-pigs, and from them to a pony; so that there can no longer be any doubt about the contagiousness of the disorder, which is denied by most veterinary men.

Dr. J. N. Stickler, of Orange, N. J., has successfully inoculated two colts with human scarlatinal virus. Dr. Fenner has seen cases of scarlet fever in horses in his own practice. Dr. Lyon reports a well-marked case of a gelding, eight years old, with enlarged submaxillary glands, sore throat, and high temperature—103° to 106°. On the next day the hair and skin of the neck, face, and shoulders were elevated by an eruption, the soreness of the throat increased, and a bright scarlet eruption was noticed on the septum nasi, followed by a muco-purulent nasal discharge. After the eruption had entirely receded, the skin began to desquamate, and the groom could scarcely make his coat presentable. Dropsical swellings of the legs and sheath occurred afterward.

THE MEDICAL REGISTER FOR NEW ENGLAND.—It is announced that a new edition of this publication will soon be issued by Messrs. Cupples, Upham & Co., of Boston. It will contain much new information, carefully compiled by Dr. Francis H. Brown, whose endeavor has been to make it of every possible assistance to those engaged in the medical profession. The book will be published at a lower rate than in previous years, and doubtless every physician and surgeon in New England will avail himself of a manual so essential in his work.

SOME NOTES ON COMPARATIVE PATHOLOGY.
 CANCER IN DOMESTICATED ANIMALS.

By W. H. BIRCHMORE, M. D.,
 CARBONDALE, KANSAS.

At present, when the relations between the diseases of man and his dependent cousins are being realized and brought to notice, and influencing many minds for their advancement in learning and to the broadening of their field of view, an account of cases such as the following needs no apology for intruding itself on the time of the thinking portion of the medical profession. Their clinical interest is not so certain, but *a priori* it may be questioned if the food from animals in whose bodies degraded material processes are going on can be any more edifying than the mental pabulum of the same description is by some held to be. If the existence of a mammary cancer in a woman would, in the judgment of a thoughtful practitioner, be good cause for doubting the advisability, surely the existence of cancerous ulceration in the udder of a cow would be good cause, for the disallowance of the use of her milk for the food of young children.

The investigation whose results this paper offers was undertaken to obtain material for the inflammatory origin of tumors. But time went on its way, the paper was never written, and now it is offered as a contribution to the general stock-in-trade of the pathologist. Its intrinsic interest is not lessened, even if it is regarded as a curiosity only; but it also indicates that, besides enteric fever, pneumonitis, and tuberculosis, another vice of nutrition is shared by us all.

CASE I.—A chicken whose humerus had been broken. Three months after, a lump the size of an egg was present. In the center of this mass the ununited fracture could be perceived. Death followed from exhaustion after some months. The lump was a very finely developed, large, round-celled sarcoma. The cells were in nests proliferating, some multinucleated. There was no proper callous formation, but the ends of the bones were swollen, softened, and covered with the cell-deposit. The lymphatic glands were not inflamed. The tumor weighed 64 grammes.

CASE II.—An old hen. Feet frost-bitten. A piece of superficial tissue about two centimetres in diameter came away from one foot. The resulting sore was treated with the compound tincture of benzoin and fresh lard, equal parts, made into an ointment. The right foot healed completely; the left nearly so. This hen hatched a brood of chickens in the spring. The next time I noticed her, about midsummer, she was moving in so peculiar a manner that I caught her, made an examination, and found the left sole occupied by an elastic mass of about the size of a pigeon's egg. The leg soon became useless, and the hen died marasmic. On post-mortem, I found the lymphatic glands enlarged, containing multinucleated cells, the stroma proliferating *pari passu*. The extremity of the tarso-metatarsal bone was a mass of encephaloid disease.

CASE III.—A capon. I removed the glands by the usual operation. The capon died, at the end of three months, of acute peritonitis. He was as large as a turkey. The post-mortem showed that the peritonitis was caused by the

bursting of a cyst containing some irritant fluid, which cyst formed part of a tumor as large as an egg, occupying the place of the right testicle. This tumor was an adenoid sarcoma. The size of the tumor was remarkable in view of the capon's development.

CASE IV.—A fine setter. Wounded in the mouth by the discharge of a gun. The canine tooth on the lower jaw, right side, was so loosened as to be disengaged by very gentle handling. Ulceration of the socket followed, and after a considerable period a tumor grew, whose size made the dog so miserable that he was allowed to die. The microscope sections thence obtained might have served as originals for the drawings of osteo-sarcomas shown in the books.

The next four cases of which I have memoranda were in horses and mules, the result of injuries from the abuse of bits. In one of them there was an exostosis, or else a submucous thickening of the roof of the mouth. The animals were otherwise in good condition.

My next was a large, mixed spindle- and round-celled sarcoma from the lower lip of a mule, caused by the irritation of the bit.

CASE X.—A papilloma, irritated by the rubbing of the bridle behind the ear of a horse, became ulcerated. I removed it and obtained some excellent sections of a connective-tissue tumor, with nests of pseudo-epithelial cells.

CASE XI.—Last spring, while visiting a patient, I learned that one of his cows was "snake-bit." Investigation showed an ulcerated mass on the udder that macro- and microscopically answered to a nodulated mammary cancer.

A case of a gastric tumor in a pig was offered at the Chicago meeting of the American Society of Microscopists.

Epithelial tumors at the point of the shoulders in abused horses are not very scarce.

Engorgement of the lymphatics of the base of the tongue following wounds that healed by leaving an indurated cicatrix have passed under my notice; also one case of a lump, of the size of a fist, that formed about the parts pressed against by a ring in a bull's nose. There was nothing destructive about this tumor, but its evident inflammatory character renders it worth mentioning.

Villous tumors of the intestine are not infrequently found in hogs.

The fact that lymphatics may swell and become indurated in pigs as the result of dysentery, and then present a very suspicious appearance under the microscope, opens a field that needs further investigation. From my own study in this direction, I am inclined to the conclusion that, as all nutritive processes as a rule are more rapid, and healing processes are more complete, in the lower animals than in mankind, interruptions and maldirection of these processes are productive of less disastrous results. Still there is evidence to be found among them, and among them alone, that makes the *modus vivendi* of the tumor brotherhood much clearer than in man. In dumb animals only can we find very young growths and remove them at our will, or remove all the neighboring tissue and appreciate its relations.

Any persons knowing of similar cases will confer a favor

by sending descriptions and either drawings or sections showing the microscopic anatomy. Specimens, where they can be obtained in masses of one cubic half-inch, will also oblige. There is need of much more knowledge than we have in relation to these troubles—their ætiology—and the only way of obtaining it is by the study, not of books, but of the things themselves.

CASE OF

SLOUGHING IRREDUCIBLE HERNIA; SPONTANEOUS RECOVERY.

By A. D. DECKER, M. D.,

PLEASANT PLAINS, N. Y.

MRS. D., a widow, sixty-six years of age, of previous good health, but habitually constipated, was seized, during the evening of April 12, 1883, with violent abdominal pain, nausea, and vomiting of bilious matter, which continued for three days. Cathartic medicines failed to act on the bowels, and on the 15th a large enema was given. This produced a free evacuation of scybala. She then improved until the evening of the 17th, when the pain, nausea, and vomiting returned with greater severity than before. On the morning of the 18th she vomited stercoraceous matter containing a lumbricus, and a severe diarrhœa set in, accompanied with much pain. These symptoms were controlled by opium, but in the afternoon she was distressed with a burning sensation in the abdomen; the skin was cold and clammy; the pulse 136 and very weak; and the tongue coated.

At this time a swelling was discovered in the right groin, about two inches long and an inch wide. It was inflamed and tender. She stated that she had noticed a lump in that situation at times for several years before, but had never felt any inconvenience from it.

On the 19th and 20th there was no nausea nor vomiting, but she continued extremely prostrated; the coldness of the surface continued, the pulse was 144 and very feeble, and the tongue was coated. The swelling had grown larger and was more tender. The burning sensation in the abdomen was relieved by the action of an enema.

From the 21st to the 24th her general condition improved, but the swelling continued to increase in size and to become more tender. The burning sensation also continued.

On the 25th the pulse was 136, and the temperature 99.5° F. The tongue was dry. The bowels moved spontaneously.

On the 26th the pulse was 144, and the temperature 99.75°. The swelling was still larger, and had become tympanitic. It was punctured with a hypodermic needle, and considerable gas escaped, giving the patient some relief.

On the 27th the pulse was 148, the temperature 101.75°, and the tongue very dry. A circular gangrenous spot two inches in diameter appeared on the lower part of the swelling. The bowels acted spontaneously.

On the 28th an opening formed through the gangrenous spot, communicating with the interior of the intestine, and giving exit to pus and faecal matter, together with a lum-

bricus. Two more spots of gangrene, half an inch and two inches in diameter, appeared above and to the outer side of the first spot. The patient felt relieved; the pulse fell to 136, and the temperature to 99.5°. The bowels moved spontaneously.

On the 29th she continued to improve, and took food freely. The pulse was 130, and the temperature 99°. The tongue was cleaner and more moist. Two more gangrenous spots appeared to the right of the pubes, also a bleb on the right labium majus. When opened, the latter discharged thin faecal matter, and exposed an opening, a quarter of an inch in diameter, the termination of a fistulous canal running from the sac above.

Up to May 6th the patient improved gradually, faecal matter being discharged freely from the openings. The gangrenous tissue had now all separated, but an ulcer was left, six inches long by two inches wide, extending from the pubes upward and outward beneath the crest of the ilium, discharging an ichorous matter. A nitric-acid lotion was ordered, and the discharge was soon changed to laudable pus. From this time on there was no further escape of faecal matter from the abnormal openings. The fistula leading to the labium was closed by the 15th of May. Convalescence was interrupted by impaction of the colon, which was relieved by a large enema thrown high into the bowel. By the middle of June the patient was able to sit up a portion of each day, and at the end of the month the ulcer had healed. By the 1st of November she walked about with the aid of a cane.

Clinical Reports.

VIENNA POLIKLINIK.

CLINICAL REMARKS IN THE COURSE ON GENITO-URINARY DISEASES.

By DR. ROBERT ULTZMANN,
PRIVATDOCENT IN THE UNIVERSITY.

Stricture of the Urethra.—Hypertrophy of the Bladder.—Urethral Fever.—Chronic Urethritis.

CASE I.—On questioning this patient, we learn that he is fifty-three years old, and that during the past twenty-five years he has had trouble in passing his water. Here we have two things to remark—in the first place his age. He is fifty-three, hence the bladder is probably weak, and not able to empty itself entirely, and this condition is doubtless due to an old stricture. In such a case as this it is not enough to examine the stricture, but we must also investigate the bladder. This man has been under treatment more or less for twenty-five years, which proves that it will not be sufficient to simply dilate his stricture. And in this connection I would say that it is not the fact that the urethra will only admit a No. 12 or 14 English. For it is much wider. We often notice in cases of median lithotomy that the forefinger can easily be passed into the bladder through the posterior part of the urethra. As regards the anterior portion of the urethra, we find that we can use very large instruments if only the meatus be first slit. In upward of sixty lithotripsies I have found no difficulty in passing a No. 28 into the bladder. But this condition becomes changed when once

the canal has lost its elasticity, a result most often produced by gonorrhœa. When we remember how rich the nervous supply of the urethra is, we can understand how the irritation caused by a urethritis can give rise to constriction. The natural elasticity of the outlet being lost, the urine can not escape so readily, hence a resulting hypertrophy and dilatation of the bladder. The urethra may become contracted to two thirds of its normal caliber. Think how hypertrophied the bladder must become in order to overcome this resistance! In a young, strong man this change may be so slight as not to be noticed, but in an old patient the bladder speedily becomes affected. The presence of hypertrophy is easily recognized. Any one who has never made an examination before can readily feel trabeculæ by sounding, and the existence of trabeculæ means hypertrophy. It is of primary importance to decide if the bladder is able to empty itself completely. If a small amount of urine, only a few cubic centimetres, remains after urination, it shows that the organ is weak. In such a case the patient must use a catheter constantly in addition to having his stricture dilated.

A patient who at twenty or thirty has a residue of only twenty c. c. remaining in the bladder, after urinating, will have from two to three hundred c. c. at fifty, with an accompanying hypertrophy.

In the present case there is a history of attacks of fever following the introduction of instruments. Now, fever is so frequent a phenomenon after the use of sounds that it would be quite erroneous to argue from it that a false passage had occurred. It is doubtless of nervous origin, and may be observed after the forcible dilatation of the vagina or rectum. We frequently see a patient, before in perfect health, suddenly seized with a violent chill after sounding. This may be often repeated, and is sometimes so severe as to shake the bed. It is simply a reflex chill, due to the stretching of the urethra. This is the beginning of so-called "urethral fever." It is not right to regard it as due to any inflammatory process, since it is usually unaccompanied by any trace of mechanical injury.

Now, to proceed with the examination of this patient. First of all, I always examine the prostate through the rectum. I find that it is not much enlarged. Now I shall try the urethra, using first a good-sized instrument (Charrière, No. 22). It is arrested in the anterior portion of the canal. A No. 19 stops at the same place. No. 17 goes in perhaps a centimetre farther, and it seems as if the instrument had entered a narrow passage, at the end of which it is again stopped. With a No. 14 I can press on as far as the bulb, but here it is firmly grasped, and can not be easily withdrawn. With a conical sound (No. 12) I can pass this obstruction also, and reach the bladder, which seems to be thickened and trabeculated. I have done enough for to-day, and shall have the patient return next week, when we shall commence the treatment regularly.

CASE II.—This man has a chronic urethritis. We say that a case of gonorrhœa is acute when it runs its course in from four to six weeks, and we say that it is cured when the discharge has ceased. But, by examination with the endoscope, we can readily see that the mucous membrane is still covered with a secretion, which is washed away during micturition, and therefore is not noticed. Most of this secretion is really a kind of false membrane developed on the mucous membrane of the urethra, and has no connection either with the prostate or with Cowper's glands. When the disease is acute, this secretion is very copious; when it becomes chronic, there are only a few epithelial scales, which come away in the urine. Microscopical examination sometimes shows the presence of semen in the discharge, and nocturnal pollutions may accompany a urethritis affecting the deeper parts of the canal. It is not easy to tell whether the anterior or posterior part of the urethra is affected

from an inspection of the secretion alone. In general, that from the posterior portion is thicker and more stringy.

This patient has passed his water, and you will observe in it small, stringy masses. Since they are so small and scattered, there are probably only a few inflammatory spots in the urethra. Where is the urethritis in this case? Undoubtedly in the anterior portion, since the patient experiences no pain during micturition. If the pars prostatica were affected he would have pain at the end of the act. What is the treatment? Chronic urethritis causes changes in the urethra. Have we evidences of thickening or stricture in this case? Can we pass a No. 24 or 26? If we find a stricture, we must proceed to dilate it at once. The second thing is to apply local treatment to the seat of inflammation. This may be done with an ordinary syringe. In acute gonorrhœa it is not only unnecessary, but positively injurious, to employ too large injections. It is better to use only half a syringe-full at a time, and to repeat the injection two or three times. Nothing can wash away the secretion so well as the stream of urine, so that it is a good plan to have the patient pass his water just before making the injection. With very few exceptions, the narrowest strictures will occur in the bulbous portion, so that in obstinate cases of urethritis we must apply our medication directly to the deep part. This will be difficult, as the bulbar muscles respond quickly to any irritation, and will force out the irritating fluid. It is important to make the applications directly, which can be done through a catheter or a syringe constructed expressly for the purpose. A small, thin catheter (No. 7) will be most convenient. Introduce it slowly to a distance of twelve or fifteen centimetres, until a hindrance is encountered. This is due to the contraction of the muscles. Inject slowly 200–300 c. c. Do this once a day, and you will meet with a speedy cure. The solution should always be warm. I use the following:

℞ Aluminis,
zinci sulphat.,
ac. carbol. pur., āā 1·00;
aquæ destill., 500·00.

This may be diluted as much as desired. Increase the strength of the solution every day until it reaches four grammes of each ingredient. Or you may employ:

℞ Potass. permanganat., 2·00;
aquæ destill., 200·00.

Add 10·00 of this to a tumblerful of warm water for each injection. You can increase this gradually up to 50·00. Finally, a third solution is:

℞ Argent. nitratis, 1·00;
aquæ destill., 500·00.

In the case of this patient I shall introduce a catheter to the end of which is attached a long rubber tube, and you see how easily the injection may be made by means of an ordinary hard rubber syringe; indeed, the patient can readily be taught to do it himself. In the present instance I can find no stricture, though the anterior portion of the urethra feels as if it were thickened.

MEDICAL DEPARTMENT OF THE UNIVERSITY OF THE CITY OF NEW YORK.

CLINICAL REMARKS BY ALFRED C. POST, M. D., LL. D.,
EMERITUS PROFESSOR OF CLINICAL SURGERY.

Scrophulous Degeneration of the Glands of the Neck.—Congenital Malformation of the Hand.—Suture of a Tendon.

CASE I.—GENTLEMEN: Before proceeding to do the operation announced for to-day, I present before you a patient with an adenomatous or glandular tumor of the neck. The tumor

has existed now for about two years, was until recently hard to the feel, and had been increasing in size. About four weeks ago the patient came under the care of the physician who has brought him here to-day, and who commenced treatment by local applications of the oleate of mercury. The growth immediately began to decrease in size and to become softer in character, thus illustrating very well the resolvent powers of mercury in these cases of scrofulous enlargement of the glands. As the tumor has evidently been resolved into an abscess, the treatment at present is to let out the matter with the knife. Instead of making a large opening, as was formerly the practice, and letting the surface heal by granulation, I propose simply to introduce the point of the knife, draw off the contents, and inject the cavity with carbolic-acid solution, 1 to 40, according to the method introduced by the late Mr. Callender, of London. The cavity is over-distended with the fluid injected, and the procedure is repeated until the solution comes away nearly or perfectly clear. It is quite certain that the abscess walls heal quicker by this method than by the old method, in which no antiseptic was used. But there is one precaution to be exercised in the use of the carbolic solution, especially in abscesses of large size, where the fluid comes in contact with a large amount of absorbing surface; and that is, the avoidance of toxic effects. In the case of small abscesses, as in the present instance, there is not much danger of such an accident. You will notice that the pus as it escapes presents a somewhat greenish appearance, and contains flocculi; it is, as in most cases of scrofulous inflammation of the glands, not laudable or praiseworthy pus—if any kind of pus can be called laudable or healthy. If the coagulated particles block up the opening before the cavity has been emptied, they can be removed by means of a probe or other instrument. I would call your attention to the kind of syringe which I employ. It is made of a hard, black rubber cylinder, either end of which can be unscrewed and removed; this the physician, especially if he lives in the country, will find of advantage, as it will enable him to adjust the piston more easily, should the instrument get out of order, and save the time and expense of sending it to the maker. The nozzle is tapering at the point, so as to adapt it to a larger or smaller orifice.

CASE II.—You saw this patient last week, a rather unusual case of defective formation of the left hand. The index and the little fingers are wanting; the middle and ring fingers are present, and are webbed together. The webbing extends from the commissure to the last phalanx, near the extremity, where the two fingers are joined throughout their whole thickness. But a single nail belongs to the two fingers. Webbing of the fingers is not a very unusual deformity, but such a combination as exists here is seldom seen. The normal difference in length between the ring and middle fingers is apparent, but the ring finger is straight, while the middle one is bent, the webbing preventing extension. I think that, in a case like this, where there is a deep groove both on the dorsal and on the palmar aspect, a simple incision through the webbing, and dressing so as to keep the fingers separate, is all that will be required. In cases where the fingers are joined throughout their entire thickness, no groove being present, it is a matter of some difficulty often to keep them from reuniting after separation. In such a case, beginning the incision at the commissure, you can make a little hole, as is done in puncturing the ear, and, at a later period, after the opening has been lined by integument, complete the division with the knife from that point. Some years ago the late Dr. J. Kearny Rodgers, one of the surgeons of the New York Hospital, introduced a new method of performing the operation. He made an incision over the dorsal surface of one of the fingers involved and over the palmar surface of the other, and dissected up the dorsal flap to cover the side of one finger,

and the palmar flap to cover the side of the other, thus separating the two fingers by healthy skin tissue, instead of leaving a raw surface to heal by granulation. This operation is attended with some difficulty, but it answers the purpose very well where you can not accomplish the object by the simple incision. One of Dr. Rodgers's associates at the hospital undertook to perform the operation many years ago, and, having completed the dissection on the palmar surface, turned the hand over, and by mistake dissected up a flap from the dorsal aspect of the same finger. Thus he had an abundance of tissue on the one finger, and a scarcity on the other.

There are some little points connected with the details of the operation which it is well to bear in mind. In the first place, when the patient is about to take ether, if you tell him to take long inspirations and not to have any fear, it will tend greatly to quiet his anxiety and tendency to struggle, and bring him much more quickly under the influence of the anæsthetic. Then, as a hæmostatic, you will find hot water to be one of the best. It should be at a temperature of 115° to 125° Fahr. If it is merely blood-warm, it will tend rather to increase the hæmorrhage than to diminish it. Water heated to the degree mentioned not only acts in checking bleeding, but it is also a better purifier than cold or warm water. It may be applied either by sponges or in a stream. Ice-water will constrict the vessels at first, but the effect is not so permanent as that of hot water. In the use of the sponge, if you wish to clean the unbroken surface of blood, it can be better done by wiping; but, if you wish to dry an oozing surface, it should only be touched with the sponge—not wiped. I employ fine silk thread as a suture—No. 0, or Double 0. This is strong enough, and is readily passed through the edges of the wound, closely adapting them to each other. Silver wire and catgut, so extensively used, are harsh and more liable to produce suppuration, and are not so easily applied. Black silk has two advantages over white silk. In the first place, it is more readily seen upon the white surface; secondly, it is blackened with a salt of iron which is not injurious to the parts with which it comes in contact. White silk is whitened with a salt of lead which has certain injurious properties, and is more liable to produce suppuration. The attention of the profession was first called to this point by Dr. Pancoast, of Philadelphia, who wrote several papers going to show the advantages of black over white silk. You will sometimes find that the patient, while under the influence of the anæsthetic, shows some disturbance of respiration. There are two methods of overcoming this, by allowing air to enter the lungs more freely. One is to grasp the tongue with a forceps and pull it forward, and thus open the larynx; but this procedure is liable to wound the tongue, and should not be resorted to until the other method has been tried. This consists in drawing the base of the tongue forward by pulling forward on the rami of the inferior maxilla, to which the tongue, as you know, is attached by certain of the muscles of which it is composed, viz., the genio-hyo-glossi. I would say that when you use fine silk thread for sutures, its tendency to fall out of the needle may be overcome by tying it in with a half-knot. Instruments made of good metal are all-important to the surgeon. Here is a case of scalpels which Dr. Wright Post, once connected with the College of Physicians and Surgeons, began to use before the commencement of the present century; it fell to me as an heirloom, and is still useful.

I have made the incision, beginning a little farther back than the normal point of departure between the fingers, to allow a little for granulation. The ends of the fingers seemed to have a bony union. The raw surface has been covered to a considerable extent by bringing the edges of the skin together with sutures; near the end, union will have to take place by granu-

lation. [The fingers were afterward wrapped with adhesive plaster.]

CASE III.—About five weeks ago this boy was cut upon the dorsal aspect of the index finger transversely near the first phalangeal joint. Since then he has not been able to extend the finger, although I am able to extend it for him with perfect ease. It is five weeks since the injury was sustained, but, as the use of the finger is of some importance to him, I shall undertake to unite the divided extremities of the tendon, with the hope that union may take place. Now that I have made an incision of some length along the back of the finger, you will notice that the proximal end of the tendon is somewhat enlarged and tumefied, while the distal end is slightly atrophied. I pare the ends of the divided tendon, unite the two with sutures, dress the wound, and the patient will return from time to time, that we may watch the result.

Book Notices.

The Law of Sex. Being an Exposition of the Natural Law by which the Sex of Offspring is controlled in Man and the Lower Animals, and giving the solution of Various Social Problems. With Forty Illustrative Portraits. By GEORGE B. STARKWEATHER, F. R. G. S. London: J. & A. Churchill, 1883. Pp. xvi-276.

No lover of books is likely to pass lightly by this handsome volume, with its thick paper, broad margins, uncut leaves, and large, clear type. The proof-reading has been most exact, and the publisher's part thoroughly well done. The author professes to have a message to deliver, not unworthy of its comely dress—no less than “a new discovery of a great law of Nature; . . . the law which governs the sexes, and whereby the sex of offspring can be controlled.” He has studied the subject for twenty years, “in various languages,” but has delayed publication until he could, “by extensive observation, establish its truth beyond the possibility of doubt.”

This great law, which the author would briefly call the law of “superior opposites,” is first stated on page 91, as follows: “Sex is determined by what I shall designate as the ‘superior parent,’ and the ‘superior parent’ produces the opposite sex”; the term “superiority,” be it understood, referring only to those qualities which control functional activity.

It being plainly of great importance that “superiority” should be clearly defined, this part of the subject is treated at sufficient length in Chapter VII and elsewhere. On page 101 it is stated that a “preponderating vital endowment produces the opposite sex.” On page 109 it is said to be determined by such characteristic indications as temperament, complexion, will, the reproductive, nutritive, and osseous systems, and by special features. “Every member, feature, expression, or action indicates something either for or against superiority” (p. 125), and each of these indications is taken up and treated of in turn by itself, even to the features of the face. Thus, prominent veins denote superiority, while a drooping eyelid is a sign of inferiority; moist hands indicate excessive lymph; and the quantity of hair in the eyebrow, the shape of the head and forehead, mouth, lips, chin, even the teeth, have each their significance. At one time he thought the nose to be a sufficient guide, having discovered (p. 154) that the more decidedly Roman the father's nose, the larger was the proportion of daughters in the family. But, although the “osseous system is generally manifested in the nose” (p. 124), his “nasal rule” did not quite stand the test of

experience, and he was obliged to add as factors a strong will, a ruling disposition, and the fact that daughters of superior fathers determine sons of their own, thus eventually equalizing the sexes. Having once mastered the solution of this sufficiently complex problem of superiority, he finds that he can generally predict at will the sex of the children upon seeing the parents. It is interesting to note that in the course of this study the author has observed that clergymen and physicians (!), and especially orators and musicians, are apt to have a preponderance of sons; so that he now places these classes “in a far lower category than that in which he would at first have ranged them” (p. 166).

Turning to the practical application of his law, the *control of sex*, he advises (p. 229) the father who desires a son to discontinue intellectual activity and cultivate the body, while the mother subordinates the nutritive system. She should study, and “abjure” tea and coffee, while he should cultivate “nerve force” by oily and amylaceous food, and consume more phosphates, in the form of fish and soft-boiled eggs.

The author is furthermore strongly inclined to think that a “temporary superiority” can be secured by temporary measures. If, for example, a daughter is desired, let the father take a Turkish bath and the mother a sitz bath (p. 235). But this is a part of the question into which he hesitates, for obvious reasons, to enter too minutely. In general terms he would say, “Let it be remembered that the basis of superiority is the quantity and quality of nervous force a person is able to command at any given time, and, generally speaking, is in the habit of commanding” (p. 245).

Now, much of this sounds like very poor nonsense, and the scientific reader must needs smile at almost every page. Yet he reads on, and, reading, finds himself unconsciously applying the law to instances within his own experience, and very probably accepting the main points of the theory itself. Before closing the book, which he is pretty sure to read through, he is fain to confess that the hasty first judgment, based upon the defects of the author's style and the haphazard manner in which he has jumbled together facts and opinions from the most incongruous sources, needs revision.

The defects of style referred to are most conspicuous in the ninety or so introductory pages, which the author devotes to discussing and clearing away the very numerous theories that have preceded his own. More than five hundred such theories, he says, were extant toward the close of the seventeenth century, and, although he does not attempt even to name them all, his citations are both numerous and various. Thus, in the four pages from 95 to 99 he quotes from and seems to have read Dubois-Reymond, Galvani, Ashbourne, J. C. Jackson, Matteucci, Bécclard, Helmholtz, Schleske, Hemmer, Giardini, Sjösten, Ahrens, Pfaff, Nasse, and Beard and Rockwell. From Darwin to O. S. Fowler and from Hippocrates to the “Medical Investigator” of Chicago are by no means too abrupt transitions for this omnivorous but too greedy and rapid reader, who delivers his mental *ingesta* unassimilated, instead of taking time to make them his own by digestion and conversion. Therefore, whenever he wanders from the straight and narrow path of his “law,” which is simple and intelligible enough, he stumbles among vague notions concerning polarity, odyllic force, electricity, magnetism, and the like balderdash, dear to untrained speculative minds.

The “law” itself seems to have been suggested by Combe's three laws of heredity: 1. The parents transmit “at the decisive moment” qualities in proportion to their actual power and activity. 2. These qualities combine and may neutralize each other. 3. The mother exercises a powerful modifying influence during gestation. Several cases reported by M. Giron, whom,

it is to be regretted, he cites only as "quoted in a French work," are strongly confirmatory of the law, as is the remark of Dr. J. Mortimer Granville ("Lancet," October 23, 1880) to the effect that what we call "atavism" means the transmission, in a dormant state, so far as she is concerned, by the female ancestor of the qualities of her male parent.

In general, "The Law of Sex" will be found to be an extremely entertaining book, perhaps more so than the author intended, and, aside from the "law" itself, for which a very plausible case is made out, is a magazine of curious and interesting facts, brought together with much labor from quarters which are often inaccessible to the general reader.

The plates are lithographs of twenty pairs of familiar portraits, united, male and female, in such a way that the series begins with the most "superior" male and inferior female, and ends with the opposite association. They add but little to the value of the book.

It is pleasant to note, where there is so much that the reviewer can not fully approve, that this difficult and delicate subject has been treated throughout without the slightest approach to pruriency of detail, or to such modes of discussion as can offend even non-medical readers.

The Pathology and Treatment of Diseases of the Ovaries. (Being the Hastings Essay for 1873.) By LAWSON TAIT, F. R. C. S., Edinburgh and England, Surgeon to the Birmingham Hospital for Women, etc. Fourth edition, rewritten and greatly enlarged. New York: William Wood & Co., 1883. Pp. 357.

It is almost always with a feeling of sympathy and admiration that Mr. Tait is mentioned among gynecologists in America—sympathy, from the impression that has taken root among us that he has had to make his way against unfair opposition in his own country; admiration, for the boldness and self-reliance shown in his practice, as well as for its remarkable success. Among those who keep the run of gynecological literature, there must be few who are not familiar with this book. Those few make a great mistake if they take it for granted that the work is essentially a plea for the physiological and surgical importance of the oviduct; it really covers the ground indicated in its title, and in a very satisfactory way, too. It is a book that no student of gynecology can dispense with. Concerning this latest edition, it can be said with truth that it is brought quite up to our present knowledge in so far as it deals with other men's work, and that it embodies the matured observations and opinions of its author.

BOOKS AND PAMPHLETS RECEIVED.

Surgical Applied Anatomy. By Frederick Treves, F. R. C. S., Assistant Surgeon to, and Senior Demonstrator of Anatomy at, the London Hospital, etc. Illustrated with sixty-one Engravings. Philadelphia: Henry C. Lea's Son & Co. Pp. xii-531.

The Operative Treatment of Intra-thoracic Effusion. By Norman Porritt, L. R. C. P. Lond., M. R. C. S. Eng., Harwick Scholar in Clinical Medicine, etc. Being the Essay to which the Medical Society of London awarded the Fothergillian Gold Medal, 1883. London: J. & A. Churchill; Huddersfield: Alfred Jubb. Pp. xii-307.

Elements of Surgical Pathology. By Augustus J. Pepper, M. S., M. B. Lond., F. R. C. S. Eng., Surgeon to St. Mary's Hospital, etc. Illustrated with eighty-one Engravings. Philadelphia: Henry C. Lea's Son & Co. Pp. xii-503.

Epitome of Skin Diseases, with Formulæ, for Students and Practitioners. By the late Tilbury Fox, M. D., F. R. C. P., and T. Colcott Fox, M. B., M. R. C. P. Third American Edition, Re-

vised and with Additions. By T. Colcott Fox, B. A. (Cantab.), M. B. (Lond.), Physician for Diseases of the Skin to the Westminster Hospital, etc. Philadelphia: Henry C. Lea's Son & Co., 1883. Pp. 240. [Price, \$1.25.]

Hints in Sickness: Where to Go and What to Do. By Henry C. Burdett, Founder of the Home Hospitals Association for Paying Patients, etc. London: Kegan Paul, Trench & Co., 1883. Pp. ix-260.

Tenth Annual Report of the Secretary of the State Board of Health of the State of Michigan, for the Fiscal Year ending September 30, 1882. Lansing, 1883. Pp. xxxviii-592.

Sepulture: its History, Methods, and Sanitary Requisites. By Stephen Wickes, A. M., M. D., etc. Philadelphia: P. Blakiston, Son & Co., 1884. Pp. 156. [Price, \$1.50.]

Medical Diagnosis: a Manual of Clinical Methods. By J. Graham Brown, M. D., F. R. C. P. E., etc. Second Edition. Edinburgh: Bell & Bradfute, 1883. Pp. xvi-370.

Clinical Chemistry. An Account of the Analysis of Blood, Urine, Morbid Products, etc., with an Explanation of some of the Chemical Changes that occur in the Body in Disease. By Charles Henry Ralfe, M. A., M. D., F. R. C. P. L., Assistant Physician at the London Hospital, etc. Illustrated with 16 Engravings. Philadelphia: Henry C. Lea's Son & Co. Pp. ix-308.

A System of Human Anatomy, including its Medical and Surgical Relations. By Harrison Allen, M. D., Professor of Physiology in the University of Pennsylvania, etc. Illustrated with Three Hundred and Eighty Figures on One Hundred and Nine Plates, many of which are Beautifully Colored. The Drawings by Hermann Faber, from Dissections by the Author. Also, Upward of Two Hundred and Fifty Wood-cuts in the Text. Section V, Nervous System. Philadelphia: Henry C. Lea's Son & Co., 1883. Pp. iv-459 to 683, inclusive.

Elements of Practical Medicine. By Alfred H. Carter, M. D. Lond., M. R. C. P. L., etc. Second Edition. London: H. K. Lewis, 1883. Pp. xvi-427.

The Physician's Memorandum-Book. Arranged by Joel A. Miner. Fifth Improved Edition, with Clinical Columns and Ledger-Sheets. Ann Arbor: Joel A. Miner.

Catalogue of Dartmouth College and the Associated Institutions, for the Year 1883-'84.

Description of a Revolving Astigmatic Disc. By Charles A. Oliver, M. D., Philadelphia. [Reprint from the "Medical News."]

Annual Report of the Surgeon-General, United States Army, 1883.

On Photographing the Larynx. By Thomas R. French, M. D., Brooklyn. [Reprint from the "Archives of Laryngology."]

Announcement of the Regular Session of 1884 of the Hospital College of Medicine, Medical Department of Central University, Louisville, Ky.

Announcement of the Baltimore Medical College, 1883-'84. Medical College of Virginia. Catalogue for 1882-'83, and Announcement for 1883-'84.

Second Annual Announcement of the Iowa College of Physicians and Surgeons.

The Sheltering Arms. Nineteenth Annual Report.

The Physician's Visiting List (Lindsay & Blakiston's) for 1884. Philadelphia: P. Blakiston, Son & Co.

Vacunacion Obligatoria, Discurso pronunciado en la Cámara de Diputados (Sesion del 6 de Julio de 1882) por el Dr. A. Murrillo, Diputado de Santiago. Santiago de Chile, 1883. Pp. 27.

Possible Cerebral Origin of the Symptoms usually classed under "Railway Spine." By G. L. Walton, M. D. [Reprint from the "Boston Medical and Surgical Journal."]

THE

NEW YORK MEDICAL JOURNAL,

*A Weekly Review of Medicine.*Published by
D. APPLETON & Co.Edited by
FRANK P. FOSTER, M. D.

NEW YORK, SATURDAY, DEC. 15, 1883.

PUERPERAL FEVER.

THE Academy of Medicine could scarcely have presented before it a subject for discussion more likely to bring out diverse views, both as to pathology and as to treatment, or more promising to its fellows, than the different morbid manifestations that are grouped under the term puerperal fever. It is very gratifying, therefore, that such a discussion has been opened in the Academy, and by the presentation of such striking views as mark Dr. Thomas's paper, the full text of which is given in this issue of the journal. Meigs's "good Gordonian bleeder" has doubtless disappeared, at least from this part of the world, but it will be a matter of some surprise if almost every other mode of treatment save Gordon's is not passed in review before the debate is finished; and even that obsolete practice may, with some show of justification, assert that it still lives in its progeny—the antipyretic treatment of the present day.

Of course, the chief value of such a discussion attaches to the practical question of how to manage puerperal fever, but an interest little less vital hinges on the pathology, a matter yet far from settled. So far as the discussion at the Academy has been carried, all the speakers who have expressed themselves on the point seem to have agreed that some form of blood-poisoning is at the bottom of the affection. It can not be said, however, that they are all in accord as to the precise part played by that fundamental factor, or as to its exact nature. The author of the paper made a distinction between septicæmia as an element in puerperal fever and that condition which results from the retention of mere decomposing matter, such, for example, as a placenta. It follows, therefore, that he looks upon puerperal septicæmia—and, indeed, he expressly says so—as the result of an infection with a specific virus. This doctrine, then, should be kept prominently in view in the discussion, and some confusion in the debate might perhaps have been avoided if it had been found practicable to apply some other term than septicæmia to the condition caused by the specific infection referred to; for, certainly, the word septicæmia calls to mind at once the idea of a poisoning of the blood by the absorption of mere septic—i. e., putrid or putrescent—material, and rather implies the absence of any special property in that material beyond putridity pure and simple. It seems vain to hope that the discussion will not be marred by the various speakers confounding terms which, like septicæmia, ichorhæmia, pyæmia, and the like, are often made use of with little if any discrimination as to their real meaning. It is well, therefore, that Dr. Thomas took pains to inform his hearers as

to just what he meant by the term septicæmia as used in connection with the subject of his paper.

Beyond the mere signification of terms, however, and over and above any confusion due to their varying interpretation, the part played by blood-poisoning in puerperal fever is scarcely viewed precisely alike by any two men. We do not gather from Dr. Thomas's paper that he regards it as practically the sole or even the only important element in the course of the disease, however prominent he may look upon it as an ætiological factor. Those who take part in the adjourned discussion will doubtless bear this distinction in mind, and it will be well for those who read the paper to do the same. Dr. Thomas is very careful to emphasize his sense of the great harm that would result from the indiscriminate use of intra-uterine injections in puerperal fever. Let the reader pay as much heed to this caution as to the potency of the method in proper cases, and the lesson to be learned from the paper and from the discussion will, we do not doubt, prove of the highest value.

NEWS ITEMS.

INFECTIOUS DISEASES IN NEW YORK.—We are indebted to the Sanitary Bureau of the Health Department for the following statement of cases and deaths reported during the two weeks ending December 11, 1883:

DISEASES.	Week ending Dec. 4.		Week ending Dec. 11.	
	Cases.	Deaths.	Cases.	Deaths.
Typhoid Fever.....	24	12	20	4
Scarlet Fever.....	46	7	59	8
Cerebro-spinal meningitis....	4	4	3	3
Measles.....	46	7	35	6
Diphtheria.....	50	16	43	28

THE TYPHOID FEVER AT PORT JERVIS seems to have been traced conclusively to a dairy farm, as had been suspected. A report will soon be made to the State Board of Health by the gentlemen who have made the investigation in its behalf.

MORE SMALL-POX FROM THE SCYTHIA.—On Thursday of last week another patient with small-pox, one of the stewards of the vessel, was admitted to the Riverside Hospital from the steamship Scythia. It is reported that the ship was not subjected to any unusual detention at the quarantine station.

THE HEALTH OF DR. WILLARD PARKER.—Dr. Parker, as many of our readers are aware, has been the subject of a number of attacks of illness during the past year or more, which have given rise to solicitude. Last week he was seized with an acute sickness, and again there has been occasion for anxiety. At the time of our going to press, however, some improvement is reported, and we trust that his exceptionally vigorous constitution will lead to his speedy recovery.

THE HEALTH OF CONNECTICUT.—By the report of the secretary of the State Board of Health, for the month of October, we learn that diphtheria, which had decreased in prevalence for a time, has again become rife in Hartford, and that a thorough investigation is to be undertaken by the board.

MALARIA AT RHINEBECK.—The prevalence of malarial disease in the neighborhood of Rhinebeck has led to an investigation by the Committee on Sewerage and Drainage of the State Board of Health, with the result of establishing the fact that one or more railroads have practically shut in a body of water that should communicate freely with the Hudson, thus rendering it stagnant. The committee recommends that the railroads

be "requested" to build additional culverts through their embankments.

THE HEALTH OF MICHIGAN.—It appears by the report of the secretary of the State Board of Health, for the week ending December 1st, that, compared with the average for the month of November in the preceding six years, remittent fever, consumption, typho-malarial fever, intermittent fever, diphtheria, bronchitis, and typhoid fever were less prevalent in November, 1883. A sanitary convention was held in Ionia on Thursday and Friday of this week.

THE SANITARY CONDITION OF YALE COLLEGE.—A good deal has been said in the newspapers lately about the prevalence of typhoid and malarial fevers among the students. In an after-dinner speech, last week, President Porter is reported to have said that positively no case of sickness had been traced to insanitary local conditions, and he intimated that there was now no greater prevalence of the diseases in question in New Haven than was to be looked for in a town so situated at this season of the year.

THE NEW YORK ACADEMY OF MEDICINE.—The following-named gentlemen have been nominated to fill offices, vacant or about to become vacant: Vice-President, Henry D. Noyes, R. F. Weir; Trustee, C. R. Agnew, S. S. Purple; Treasurer of the Board of Trustees, J. H. Hinton, D. B. St. John Roosa, F. A. Castle; Committee on Admissions, Daniel Lewis, E. H. Janes; Committee on Education, W. Gill Wylie, John Shrady; Committee on Ethics, C. Dixon Varley, F. V. White; Committee on Library, A. Jacobi, H. D. Nicoll; Treasurer, E. H. Peaslee, W. F. Cushman.

THE MEDICAL SOCIETY OF THE COUNTY OF NEW YORK will hold its next meeting on Friday evening, December 21st, instead of Monday, the 24th.

A MARINE HOSPITAL FOR NEW YORK.—A memorial has been presented to the House of Representatives praying Congress to provide for the establishment of a permanent marine hospital in the neighborhood of New York. The petition is indorsed by the Chamber of Commerce, the Produce Exchange, the Maritime Association, the Board of Trade and Transportation, the Cotton Exchange, the Mining Exchange, the Stock Exchange, the National Petroleum Exchange, the Sailors' Snug Harbor, the American Seamen's Friend Society, and the Sandy Hook pilots.

A POLLUTED WATER SUPPLY.—The water supply of the city of Waterbury, Conn., drawn from Mad River, is reported to have become quite impure of late, owing, it is supposed, to the river having been tainted with refuse material from a number of factories that have been established on its banks.

THE NEW WING OF ST. VINCENT'S HOSPITAL was visited by a number of invited members of the profession last Sunday, and the impression made on the visitors was in the highest degree creditable to the institution.

ALLEGED GRAVE ROBBERY IN BALTIMORE.—The report reaches us that Dr. Randolph Winslow, the demonstrator of anatomy in the School of Medicine of the University of Maryland, was lately arrested, together with a colored man, under circumstances which tend to the suspicion that they were preparing to desecrate a grave in the Bayview Asylum Cemetery. They are said to have had a horse and wagon in waiting in the neighboring wood, and a bag containing a spade was found on the negro. After a hearing before a justice of the peace, they were admitted to bail pending action by the county authorities. We trust that Dr. Winslow will succeed in establishing his innocence.

CORPSES RECLAIMED FROM A DISSECTING-ROOM.—The bodies of two men were recently delivered to the friends of the deceased, on the requisition of the keeper of the Morgue, after having been partly dissected in the anatomical rooms of the Medical Department of the University of the City of New York, to which they had been delivered in accordance with the provisions of the Anatomy Law. The bodies had not been traced until after the lapse of the time they were required to be kept at the Morgue. Not only were they given up without objection, but every effort seems to have been made to repair their mutilation so far as possible.

THE ORANGE COUNTY FARMERS' MILK COMPANY has very properly asked the State Board of Health to examine into the truth of the allegations lately made by a physician of Goshen as to the neglect of proper sanitary precautions by the milk-producers.

COLOR-BLINDNESS IN THE NAVY is probably to be made the subject of an investigation by order of Congress.

THE JOINT CONGRESSIONAL COMMITTEE ON EPIDEMIC DISEASES consists of Messrs. Harris, Garland, Jonas, Hampton, Sewell, Bowers, and Fry.

THE "INDEX MEDICUS."—The publisher of this most meritorious periodical has issued a circular in which a fresh appeal is made to its subscribers, and to those who ought to be on its list, to aid in saving it from the necessity of being discontinued for lack of support. The following questions are asked of each subscriber: "If the subscription price of the 'Index Medicus' is fixed at \$10 per annum, are you willing to renew your subscription for 1884 at that rate? 2. Should not 500 subscribers renew at \$10, will you be one of 417 subscribers who are willing to renew at \$12?" The publisher also suggests that a more active support among medical societies would provide for a division that would entail but small expense on individuals. We cheerfully repeat all that we have said in the past in commendation of the "Index," and trust that the profession will not suffer it to die.

THE "CHRISTIAN HEALER," having apparently been disgusted with his treatment in Brooklyn, has set himself up in New York. We commend him to the County Medical Society.

THE "PITTSBURGH MEDICAL JOURNAL."—With its December issue, completing the third volume, the "Pittsburgh Medical Journal" ends its existence, at least for a time. The career of the "Journal" has been creditable, and it is to be regretted that, for reasons which are given, the editors find themselves unable to continue its publication.

OBITUARY NOTES.

FRIEND D. LORD, M.D., of NEWTON LOWER FALLS, MASS., died on Saturday, the 8th inst. He was a native of Maine, and was graduated from the Medical School of Bowdoin College in 1847. He removed from Sterling, Me., in 1867, to Newton Lower Falls, where he had been much esteemed as a citizen and a physician, and was noted for his kindly interest in the poor, having given his professional services freely to those who needed but could not pay for them. He was a member of the Massachusetts Medical Society, and of the Middlesex South District Medical Society.

J. LEIGHT DORKSEN, M.D., of BALTIMORE, died on Sunday, the 9th inst., at the age of twenty-five. He was graduated from the University of Maryland School of Medicine in 1880, and was a member of the Medical and Chirurgical Society, the Microscopic Society, and attending physician to the Presbytery

rian Eye and Ear Charity Hospital. At the time of his death he occupied the clinical chair of Diseases of the Eye and Ear in the Baltimore Medical College.

Proceedings of Societies.

NEW YORK ACADEMY OF MEDICINE.

A STATED meeting was held December 6, 1883, FORDYCE BARKER, M. D., LL. D., President, in the chair.

Dr. T. GAILLARD THOMAS read a paper on THE PREVENTION AND TREATMENT OF PUERPERAL FEVER. [See page 649.]

Dr. W. M. POLK was requested to open the discussion, and said that he believed he uttered the thought of every member of the Academy in saying that we were deeply indebted to Dr. Thomas for his able and eloquent presentation of this most important subject. The author had discussed the entire question so fully that there seemed but little left to be said, especially with regard to treatment. With regard to the pathology, however, he thought it would perhaps have been better, in view of the stress which Dr. Thomas laid upon antiseptic treatment, which, of course, most of us would accept, if he had planted himself more squarely upon the pathological view which regarded puerperal fever as identical with septicæmia and pyæmia. So long as there was any doubt with reference to this point it seemed to him that some doubt would be felt by many in reference to the propriety of many of the measures advocated in the paper. So far as he himself was concerned, he considered the disease as identical with that of surgical septicæmia and pyæmia. He did not mean to say that the future might not bring forward facts which would tend to change this view, but, as the question now stood, he thought that it was the one which should be accepted. If we would look at the clinical history of puerperal septicæmia we should find that it was identical with that of septicæmia and pyæmia as seen in surgical cases; the lesions were the same. Such variations as were manifest in the symptoms or pathological lesions were to be accounted for by the peculiar condition of the tissue involved. It was only in the domain of ætiology that those who opposed this view found their last refuge. They maintained that there must be some peculiar poison which could excite the disease in so many individual cases. But, if it was taken into consideration that a woman recently delivered had within her pelvis a sluggish stream of effete material, which, owing to the dilated condition of the blood-vessels and lymphatics, making them unable to respond properly to blood pressure, found its way into the general circulation, and if it was also remembered that the blood corpuscles in these patients were deficient, and, that consequently, their ability to oxidize tissue, and especially poisonous material, was diminished, we should recognize a condition which was quite sufficient to account for the peculiar susceptibility of the puerperal woman to this poison—a susceptibility which certainly was greater than in almost any other condition.

As to the matter of treatment, accepting, as he did, the view that the affection was identical with septicæmia and pyæmia, the principles of Listerism as laid down by Mr. Lister and his followers, and as had been so ably advocated by Dr. Thomas to-night, it seemed to him, entirely covered the ground. So far as precautionary measures were concerned, he thought there was absolutely nothing to be added to those mentioned by Dr. Thomas. He would merely suggest that, in this city, where defective drainage was known to exist, the question of the purity of the air was one which should be specially inquired into. It was well known that cases of diphtheria or scarlet fever were

modified by the surrounding atmosphere, and nothing was more certain than that, if a patient in the parturient state were confined to an unwholesome atmosphere, she must suffer in consequence. So far as measures of actual treatment were concerned, he had but one simple suggestion to make, namely, that in his experience it had often occurred to him to use intra-uterine injections, when in reality the sole lesion that was leading to the death of his patient existed in the cervix. As a general thing, the stream of water, as it flowed from the interior of the uterus, was not of sufficient weight to separate the closely applied cervical walls, which were often in a sloughing condition. It had been his rule, therefore, to make a thorough inspection of the genital passages, by means of Sims's speculum, as far up as the external os, and then to draw down the cervix by means of a tenaculum, and separate its surfaces in order to learn the true state of things there; and, if he found any lesion, he applied directly to the spot a strong solution of carbolic acid or some other strong disinfectant. In fact, in many cases, this had been about the only treatment which he had found necessary. With regard to the interior of the uterus, if the condition of the vagina and cervix did not seem to be the cause of the disturbance present, the practice had been advocated of introducing borated cotton, twisted upon an ordinary applicator, and dipped into a two-per-cent. solution of carbolic acid, up into the interior of the uterus, and thoroughly wiping out the cavity. Dr. Polk had even gone further in cases in which he had reason to believe that there was decomposing material in the uterus, and had introduced a particular kind of curette, known as Skene's curette, a blunt instrument, that could be carried up into the uterus, and, if handled gently, without doing any harm. With this he had been in the habit of removing any portions of membrane that might be present. In conclusion, he would merely say that, if we were to adopt the measures which had been so appropriately and so ably advocated by the author of the paper, we must go a little further than he had seemed willing to go, and plant ourselves squarely upon the ground that we had to do with a condition of things that in no respect differed from surgical pyæmia and septicæmia.

Dr. J. B. HUNTER said that Dr. Thomas, it seemed, had left very little to be said upon the subject under consideration, but he should be very glad if he were able to say a part of that little. There were two or three points in the paper with regard to which he would differ from Dr. Thomas. He would speak only on practical points. In the first place, referring to puerperal septicæmia, as the author had called the condition, and not to peritonitis, he had firm convictions on the subject of washing out the uterus based on personal experience. He could testify as to the difficulties of doing it, and he did not think that it should ever be intrusted to a nurse. In its performance, it was very important that the patient be disturbed as little as possible, and he thought that the method described by Dr. Thomas would give the patient unnecessary disturbance. If a large bed-pan were used, the uterus could be washed out while the patient lay upon her back, without disturbing her position in bed at all. With regard to instruments for this purpose, he did not like the one passed around, namely, Chamberlain's unmodified. He had had one made for this special purpose, being of about half the caliber and half the length of Chamberlain's, and the apertures were grouped near the end of the tube. Chamberlain's instrument was too large, and the water escaped through the apertures into the vagina before it reached the distal end. He had found, after making two or three injections at intervals of three hours, that the uterus was apt to contract, so that it was difficult to introduce the tube. In that case an instrument of smaller size could be employed, such as Nott's double catheter. He had sometimes found it necessary to put the

patient on the side, and dilate the canal somewhat, so that the tube could be passed again. A point of special importance in carrying out the treatment was to have the injections given regularly, and with perfect gentleness, without disturbance to the patient. It was often difficult to get appropriate co-operation between the patient, the nurses, and the family, as they were apt to think something improper or dangerous was being done. As to the effects of the injections, he had found a very common fear of its producing shock or other disturbance, but such fears had never been realized. He had seen but a single case in which anything approaching a chill had been produced by it, and in that case it was due to the fact that the water employed was a little too cool; it was scarcely as warm as the temperature of the body. He was in the habit of employing a carbolic solution at 110° F. He usually gave the injections once in three hours, but their frequency should be regulated by the temperature, and for this reason a physician should be present with the patient all the time. He had found it necessary in some cases to repeat them every two hours. He had often witnessed the fluid coming away clear, and it might be regarded by those present as an indication that a mistake had been made, and that the affection was not due to the condition of the interior of the uterus; but, if the injections were continued, it would be found that they were accompanied after some hours by a fall in temperature. In one case, in which the patient was considered by her attending physicians as moribund, delivery had taken place seven weeks before. She had had a temperature, for six days before he saw her, of from 103.5° to 105°. The uterus was washed out, although against the judgment of some of the physicians present, and, this being repeated every two hours, at the end of twenty-four hours the temperature was brought nearly down to normal. The injections were suspended, and the temperature rose again. The case was not one of peritonitis, but of septic poisoning. The injections were continued for three days longer, the temperature being thereby controlled, and at the end of that time the patient was out of danger.

He did not think that the coil referred to by the author should be used in simple puerperal septicaemia. In peritonitis he had the strongest possible confidence in it. But in puerperal septicaemia, if there was no great tenderness over the abdomen, and the patient evidently was not suffering simply from high temperature, he thought the use of cold water was very misleading. The temperature in any case could be lowered by the coil, but it might be done in septicaemia and lead one to overlook the fact that all the while there was being absorbed more and more of the septic material. In one case in which he had employed it, after removing it he was able to bring down the temperature and keep it down by the use of intra-uterine injections. When the coil was used, he preferred metal to rubber; it weighed less, was far more manageable, and could better be kept clean. Wrapping the rubber coil with woolen material was especially objectionable.

Dr. E. L. PARTRIDGE said that he would speak only with reference to certain practical points which had been brought out. He certainly did not think, with regard to the pathology, that there could be any essential differences in the minds of those who had had experience in the management of obstetrical cases with septic poisoning. With regard to prophylaxis, with the same emphasis that Dr. Polk had spoken of pure air would he speak of extreme cleanliness, especially on the part of the medical attendant. He would just as soon place a patient about to be confined under the care of certain gentlemen who were daily making autopsies at hospitals as under the care of many physicians who were very careless with regard to personal cleanliness. Thorough cleansing of the nails with the brush and general cleanliness on the part of attendants were probably the

most important points in the prophylaxis of puerperal septicaemia. As to the treatment of septic poisoning after it had been established, he would use the intra-uterine injections with the same frequency that had been recommended by Dr. Thomas and the other gentlemen. With regard to the agent to be employed, he would simply say that about a year ago the late Dr. Beverley Livingston introduced a supplement to the intra-uterine douche into the Nursery and Child's Hospital, which he believed to be of great value. After thoroughly cleansing the uterine cavity by means of the douche, he took a mixture of iodoform and glycerine, one to ten, and injected it into the uterine cavity. The iodoform was thus left in contact with the uterine walls longer than any antiseptic material otherwise introduced, and it did away with the necessity of repeating the douche so frequently. He approved of the bichloride solution, 1 part to 2,000, and, if it were not better than, it was certainly as efficacious as a solution of carbolic acid. He believed in the use of the coil for the reduction of temperature in puerperal septicaemia, even when there was no peritonitis. In these cases the temperature should be kept down, and this was one of the most efficient means for doing so. We should not always look for immediate and marked results, but should be satisfied if the case ran along with only a moderately high temperature. There was no other part of the body where the coil would be so efficient in controlling the temperature as over the abdomen. Perhaps the reduction of the temperature was due in part to its influence upon the solar plexus. Further, he favored the rubber coil, and for the same reason that Dr. Hunter had given when he expressed his preference for the metal coil: that it was easier to keep clean, especially if foreign bodies entered the tube from the melting ice. The objections made to the use of the coil had been more on the part of the patient's friends and the nurses than from the patient herself. When first applied, she complained of about as much discomfort as patients did on receiving their first rectal injection, and afterward often expressed herself much more comfortable with than without it.

The PRESIDENT said that, as the hour was growing late, and as a number of gentlemen were present who had not yet had an opportunity to discuss the paper, he would suggest that further discussion of the subject be postponed until a future meeting of the Academy. Twenty-five years ago a long discussion upon this topic took place in the halls of the Academy, and eight years ago the Obstetrical Society of London appointed a special meeting for the same purpose, at which he was invited to be present and to give expression to his views. At that time the views which he advocated he believed were not shared by a single gentleman present, but a large number of prominent persons who then opposed them were to-day in full accord with him, and had told him so. The author of the paper had not considered it worth while to make any allusion to those views, confining himself to an expression of his own, as he had a perfect right to do, but it seemed to him that, on so important a subject, it would be well, so far as possible, to have all views brought out, and that there should be an opportunity for a full expression of opinion. There were points in the paper with regard to which he held views quite different from the author's, as, for instance, with regard to the pathology. He would accept in every particular the author's description of septicaemia in the puerperal state, but as to the sum total of the conditions present he would differ from him. As there were many other gentlemen also present who had not had an opportunity to discuss the paper, on account of the lateness of the hour, he would suggest that the first meeting of the Academy in February be set aside for this purpose, and, if it would not be considered improper, he would propose to open the discussion himself on that occasion.

On motion, the suggestion of the President was adopted.

COLLEGE OF PHYSICIANS OF PHILADELPHIA.

Meeting of November 7, 1883.

ENTERIC PARAPLEGIA.—DR. ROBERTS BARTHOLOW read the following paper:

By the term enteric paraplegia I intend to express the conception of a spinal paralysis, produced by an intestinal disorder. It is a truly reflex paralysis. The fact of the existence of such a malady is denied by many, and, indeed, most of the reported examples will not bear careful inspection, for it will be found, as I shall show, that they are really cases of ascending neuritis. Eliminating such from the examples of true reflex paraplegia to be found recorded, I intend to place the latter in a special group composed of cases presenting the symptoms of an enteric disease, during the course of which a motor and sensory paraplegia manifests itself, and pursues a course obviously dependent on the original lesions. The cases I have lately seen occurred in men over sixty years of age, and each one presented a morbid complexus so distinctive and uniform as to entitle it to be regarded a substantive affection—a pathological entity. Although such cases have been described as examples of reflex paralysis, they have not been adequately differentiated from others similarly classified, but of different nature. Before attempting the task of analysis and differentiation, I must give a brief outline of three cases, the most recent which have come under my observation.

CASE I.—Mr. R., aged sixty-four, merchant and banker, of very vigorous and robust frame, rather spare and bony in outline, but capable of great endurance, called on me a year ago, among other physicians of this city, for relief to an obstinate bowel affection. His story was this: For a year or more previously he had suffered with intestinal indigestion, colic pains, flatulence, and considerable depression of spirits. Soon after these symptoms were experienced he began to have pain in the back, with more or less band-like constriction of the abdomen, a feeling of numbness in the feet and legs, a strong sense of fatigue in the inferior extremities, followed by weakness and awkwardness of movements in walking, obstinate constipation, and slowness in the emission of urine. For the relief of these alarming symptoms he consulted an eminent practitioner of this city, who diagnosed myelitis and advised cups, the moxa, and a pill which probably contained ergot. Without using any of the local applications, Mr. R. took the pills, which had a favorable effect in relieving the flatulence and constipation, but presently dysenteric attacks supervened, and then a remarkable change ensued in the spinal symptoms. Up to this period the paraplegia had steadily increased, and walking had become exceedingly difficult, but the change in the condition of the intestine effected a revolution in the state of the spinal functions, and in the course of a few weeks all the paralytic symptoms had disappeared. Still troubled with intestinal indigestion, Mr. R. finally consulted me, among others, when I learned the details of the case just given. Very recently I have heard that Mr. R. continues free from the spinal symptoms, and has, in the main, got rid of his intestinal disorder.

CASE II.—Mr. P., a tall, thin, but hardy Quaker farmer, aged seventy-two. I saw the patient at his home near Delta, York County, this State, in consultation with Dr. Hickman, a very intelligent practitioner living there. I learned that the patient, some ten years before, had experienced a similar attack, but had recovered rather suddenly under the influence of some remedies which were then prescribed. For some years he remained comparatively free from disorders of digestion. The present attack came on during the past winter; at first there appeared a very considerable disturbance of digestion—acidity, pyrosis, flatulence, and colic pains. The distress was increased by taking food, and apparently attained its maximum when the alimentary materials entered the intestines. In fact, the symptoms of intestinal indigestion were the most pronounced throughout, and to these were added obstinate constipation, the stool consisting of balls united by masses of mucus or coated with the same. Very soon after the gastro-

intestinal catarrh was established, Mr. P. began to experience numbness of the feet and legs, and an increasing difficulty of locomotion. At the time of my visit with Dr. Hickman the patient was nearly entirely disabled. The history of very severe and continuous digestive troubles was repeated. I will, therefore, to occupy as little time as possible, pass on to the objective examination of the paraplegia. He could not stand without assistance; there was an extreme degree of ataxia; the muscles were so weak that his utmost efforts could not at all hinder slight movement of extension when the legs were flexed on the thigh; the tactile sense was so lowered that the points of the æsthesiometer could not be felt at all; the muscles responded feebly to an induction current; the emission of urine was very slow and there was much dribbling afterward, and the bowels were extremely sluggish. There was a feeble knee-jerk. With attention directed entirely to the digestive trouble, beginning with an exclusive milk diet, in two weeks a marked improvement was manifest in all the symptoms, the paraplegia disappearing. In a letter recently received from Dr. Hickman, I learn that, after a period of very great improvement, Mr. P. began to decline in strength, owing to failure of the functions concerned in nutrition.

CASE III.—Mr. McK., of Clearfield County, about sixty years of age, has had for many years frequent attacks of sick headache. Within the past year pronounced symptoms of intestinal indigestion, pain of a colicky character, flatulence, and irregular action of the bowels, etc., have come on; but the symptom which has caused the greatest apprehension, and on account of which, more especially, he has called on me, is an increasing numbness, with some diminution of power, of the inferior extremities. The tactile, pain and temperature senses are not abolished, only slightly impaired, and the tendon reflex is unaffected. A feeling of fatigue, of weight and heaviness is felt in the legs, but locomotion is not as yet much affected. I await further developments in the symptoms referable to the nervous system, but meanwhile treatment is directed to the gastro-intestinal disorder.

Cases similar to those which I have thus briefly outlined have been recorded by various observers. An admirable example, and one of the first of its kind, was narrated by that eminent clinician, Graves, of Dublin ("Clinical Medicine," edition by Neligan, vol. i, p. 558). In this case extreme gastric disturbance, with less important intestinal, came on in distinct paroxysms, varying in duration from several days to two or three weeks, and accompanied by complete motor paraplegia. For a time, entire recovery took place, the paralysis disappearing with the cessation of the other symptoms. Finally the attacks grew so frequent as to be almost continuous, and death ensued from exhaustion. The minutest examination failed to disclose a lesion in any organ of the body. With the advance in our means of investigating morbid states, such cases of presumed functional disease of the nervous system are becoming more and more rare. That there is a condition of reflex paraplegia, due to anæmia of the cord, is a postulate I expect to maintain. That there is, however, a so-called reflex paraplegia connected with diseases of the gastro intestinal and genito-urinary tracts, which is not truly reflex, is another postulate that I believe to be susceptible of demonstration.

There was a period, in England more especially, when the notion of reflex paraplegia secondary to intestinal, renal, and genital disease was widely entertained. The cases first reported by Stanley ("Medico-Chirurgical Transactions," vol. xviii, p. 260), Brodie ("Lectures on Urinary Organs," p. 115), Stokes ("Practice of Medicine," Treatment of Nervous Diseases), Graves, and others, were supplemented by the striking narratives of Gull ("Guy's Hospital Reports," various papers). Then Brown-Séquard ("Lectures on Paralysis," etc., 1861) gave a scientific explanation of the mechanism, referring the paralysis to vaso-motor action. It must be admitted, nevertheless, that the doctrine of a reflex paralysis has not maintained the position it once had. In no modern work is the subject

treated with the extent and gravity befitting an important disease.

The two postulates I purpose to sustain are: 1. That there is a reflex paraplegia due to a functional disturbance of the intestine—enteric paraplegia. 2. That there is a paraplegia having its initial seat in the end organs of the nerves distributed to the mucous membrane, thence ascending to the cord by a progressive neuritis. As respects the first postulate, the cases I have narrated, and many others on record, demonstrate a causal connection between the enteric disorder and the spinal. That the paraplegia is functional is proved by its prompt cessation, when the cause is removed. One of the means of determining whether a given paraplegia is due to a myelitis or to mere anemia—that is, functional—is the subcutaneous injection of strychnine. At a late meeting of the American Neurological Association, Dr. Jewell, of Chicago, recounted his experiences with considerable doses of strychnine, in cases of paraplegia, which improved so remarkably that they must have belonged to the merely functional group. It is in a high degree probable that cases of merely reflex paraplegia—of enteric paraplegia—especially as they occur in aged subjects, are relatively frequent, and happen from a degree of intestinal disturbance that seems a mere accident of the morbid complexus.

What is the mechanism? We are helped in our consideration of this question by physiological data. Kussmaul and Tenner (quoted by Erb) have shown that sufficient loss of blood will cause paraplegia. Tying the abdominal aorta, and its obstruction by disease—of which Gull ("Guy's Hospital Reports," 1858, p. 311) has given a striking example—embolic blocking of the spinal vessels, as Panum (Virchow's "Archiv." Band xxv) has experimentally demonstrated, and large uterine hæmorrhage, as Montard-Martin ("Union médicale," 1852) has shown, have alike stopped the spinal cord functioning. In other words, an insufficient blood-supply—an anemia—is a cause of paraplegia. Brown-Séquard in his lectures, published in 1861, maintained the thesis that a strong contraction of the vessels of the cord induced by reflex stimulation is the essential condition in reflex paraplegia. We should not lose sight in this connection of the degree of stimulation necessary. A moderate degree of intestinal irritation suffices, for the law of reflex contraction of the vaso-motor fibers may be formulated thus: irritation of the end organs of the sensory nerves, not too violent and long continued, stimulates the vaso-motor center in the medulla, and causes a general contraction of the arterioles; but excessive and protracted irritation depresses the vaso-motor center and relaxes the vessels. It seems probable that an ordinary intestinal indigestion, and the stretching of the nerve-fibers produced by retained gas, is a degree of irritation sufficient to produce the supposed effect. To the further elucidation of the mechanism of enteric paraplegia, it is necessary to recall the fact that the blood-pressure in the vessels of the intra-abdominal organs rises and falls within considerable limits in quite an independent manner, controlled doubtless by the same ganglia that regulate the caliber of the intra-spinal blood-vessels.

The circulation within the spinal canal is peculiar, in that the veins bear such a disproportionate volume to the arteries, and that the whole vascular supply is in a certain sense a diverticulum. Atheroma of the vessels will contribute to the result of reflex irritation, and hence it is that paraplegia has resulted from endarteritis of the spinal vessels.

The second postulate is that the paraplegia which succeeds to certain cases of enteric, renal, or genital disease is due to an ascending neuritis. Chronic dysentery, pyelitis, and vesical catarrh are affections during the course of which the spinal cord has become diseased. Lesions of continuity involving the terminal nerves in structural changes are necessary to the produc-

tion of this effect. The part which ascending neuritis may play in causing anatomical alterations of the spinal cord is exhaustively shown by Friedreich in his monumental work on progressive muscular atrophy ("Ueber progressive Muskelatrophie, über wahre und falsche Muskelypertrophie," Berlin, 1873). Whether we accept his conclusions or deny them, we can not withhold the full measure of admiration for his labors. Starting with the theory of an intra-muscular neuritis, Friedreich holds that, by an extension of this affection upward, the cord is ultimately reached, and the changes belonging to progressive muscular atrophy are wrought. The intra-muscular neuritis admitted, the rest may easily follow. Under the term "chronic ascending neuritis" Dumenil has described the changes in injured nerves which, caused by trauma, proceed from the point of injury up to and involve the cord. Vulpian has especially demonstrated the modifications produced in the spinal cord by the section of a principal nerve in a member, usually the sciatic ("Archives de physiologie normale et pathologique," No. 3, 1868, p. 443). The nerves of a limb amputated, as Dickinson has especially shown, undergo degenerative atrophy, and that part of the spinal cord in anatomical connection therewith also atrophies. Many other observations might be quoted, but these will suffice to show how changes in the cord follow injuries to peripheral nerves.

In paraplegia secondary to ulceration of the mucous membrane we can readily, I think, conceive of a lesion of the peripheral nerves and an ascending neuritis to which the succeeding changes are due. It follows that such cases require a very different prognosis from those of simple reflex paralysis. The course and termination of the latter are affected by the causal lesions, while the former pursue a steadily unfavorable direction from the beginning of the spinal symptoms. The differentiation of reflex from secondary paraplegia is made by attention to the following points:

Reflex paraplegia is sudden in its onset, or, at least, develops quickly; secondary paraplegia is gradual in its evolution; the former is soon complete in all points of its symptomatology; the latter attacks one spinal function at a time. Reflex paraplegia follows the fortunes of the producing malady; secondary paraplegia pursues an independent course, and, when the alterations begin in the spinal elements, they proceed in their own way, just as after amputation of a limb the changes in the cord go on in the associated nerve-fibers, or, as in Landry's ascending paralysis, the lesions proceed by contiguity of tissue. Reflex paraplegia, of and by itself, never proves fatal, nor does it inflict permanent damage; secondary paraplegia may be the cause of death, and, if not fatal, effects lasting mischief.

To this view of reflex paraplegia it may be objected that extreme variations in the vascular supply must ultimately lead to structural changes. This is certainly possible, but the spinal, like the cerebral circulation, is arranged to permit considerable variations in the amount of blood.

It remains to explain, if an explanation be possible, why intestinal or renal lesions may in one case produce a merely reflex disturbance, and in another set up an ascending neuritis. There are, probably, two reasons: 1. The depth and extent of the peripheral lesions; 2, an inherent susceptibility to degenerative changes in the nervous elements. The first to me has profound significance, and I have already alluded to it. A degree of peripheral irritation not too great will merely stimulate the vaso-motor centers, and cause anemia of the cord by tonic contraction of its vessels, but, when the lesions of the mucous membrane are of a destructive kind, depression of the trophic centers, as well as of the vaso-motor, ensues. That there is a neuropathic type of constitution, in which the nerve-tissues are peculiarly prone to take on morbid changes, is an indis-

putable fact. When the two influences coincide, the result is not doubtful.

I must, then, conclude that there is a malady which may properly be entitled *enteric paraplegia*.

NEW YORK PATHOLOGICAL SOCIETY.

A STATED meeting was held November 28, 1883, Dr. G. F. SHRADY, President, in the chair.

Dr. J. W. HOWE presented a specimen, and read the history of a case, of POPLITEAL ANEURYSM, for a candidate for membership.

HYDROCEPHALUS.—Dr. H. N. HEINEMAN presented the hydrocephalic brain of a child who died at about the age of two years. It was admitted into Mount Sinai Hospital with the history that when about two months old it fell from a chair, struck upon the head, and had not been well since. It afterward had had an eruption upon the body, and some febrile movement. The measurements of the head at about one year of age were twenty-three centimetres from the forehead to the occiput, and about fourteen centimetres from one ear to the other, posteriorly. There was some increase in size during the last six weeks of life. Before death the temperature rose somewhat, and finally to 104° F.; there was some vomiting; no convulsive seizure. The patient had not been able to walk, but lay in bed, the head resting upon a pillow. At death the body weighed less than twelve pounds. The chief interest of the case was the great thinning of brain tissue. There was a little more than a quart of fluid in the lateral ventricles; the convolutions of the hemispheres were almost completely unfolded. There was no distension of the central canal of the spinal cord. The immediate cause of death was probably broncho-pneumonia.

SARCOMA OF THE STERNUM.—Dr. C. HEITZMANN presented a specimen, and said that the patient, a physician, came to him in April, 1882, to have the blood examined, believing that he was suffering from leucocythæmia. He had had malarial fever for years, and said the spleen was enlarged. Dr. Heitzmann found a decrease rather than an increase of the colorless blood-corpuscles, and the red corpuscles presented a peculiarly dark carmine color. There seemed to be some impediment in the circulation, and a change of climate was advised. A small tumor, evidently connected with the periosteum, existed over the sternum, which was afterward aspirated, and some of the bloody fluid sent to him for examination. The examination led only to the suspicion of sarcoma, but afterward the appearance of the colorless blood-corpuscles was such as, in his opinion, indicated approaching death. Tapping of the tumor had been attended by considerable relief to the breathing, but on one occasion during the procedure the patient died. At the autopsy the body was much emaciated, and the tumor over the sternum, about the size of a large egg, was found connected with the periosteum, and to have communicated with the anterior mediastinum through a hole which would admit the little finger. The cavity with which it communicated contained blood. The adjoining pleura and the apices of the lungs were transformed into fibrous connective tissue, believed not to be malignant in character. The primary tumor over the sternum, however, was found to be a sarcoma. The spleen was much enlarged and very firm. There was interstitial hepatitis. The bronchial glands were sarcomatous. Dr. Heitzmann said that he once made the diagnosis of sarcoma of the lungs in the case of a patient who spat up a large number of globular elements, smaller than pus globules. His physicians had made the diagnosis of carcinoma. The autopsy showed sarcoma.

ACUTE PYÆMIA FOLLOWING THE PASSAGE OF A SOUND.—Dr. G. L. PEABODY presented the heart of a man who had died of

acute pyæmia following the introduction of a sound into the urethra. The sound had been passed for dilatation of a stricture in the bulbous portion, and apparently produced little injury. It was followed by chill and fever, and, in the course of a few days, resulted in death. At the autopsy there were well-marked signs of pericarditis, which had been recognized during life, and also acute ulcerating endocarditis, and commencing abscesses of the kidney. The blood-vessels in the neighborhood of the abscesses contained a greater number of micrococci than had been observed by Dr. Peabody in any other case.

ENORMOUS DILATATION OF THE URETER ATTENDING PARALYSIS DUE TO SPINA BIFIDA.—Dr. R. VAN SANTVOORD presented a specimen from a boy who died at about the twelfth year of age in the Randall's Island Hospital. There had been spina bifida, attended by paraplegia and paralysis of the rectal and vesical sphincters. At six months of age the patient was operated upon, but in what way he had been unable to ascertain. The operation resulted in cure of the spina bifida. Following the cure there was restoration of power in the legs and in the sphincter ani, but difficulty with urination continued; the water had to be withdrawn by the catheter. When the patient entered the hospital it was supposed that, instead of retention of urine, contraction of the walls of the bladder would be found. When, however, the house physician passed the catheter, a quart of urine was withdrawn. Catheterism was continued daily. The boy lost appetite, there were nausea and fever, the urine was turbid, contained pus and albumin, and, in the course of about three months, death took place from exhaustion. At the autopsy the bladder was found to be much thickened and sacculated, the left ureter was dilated to a size larger than the small intestine, the pelvis of the kidney was also dilated, and the organ contained numerous abscesses. The right ureter was less dilated, and the kidney contained abscesses.

EXTIRPATION OF THE METATARSAL BONES FOR BUNION.—Dr. L. H. SAYRE presented some metatarsal bones which had been removed from either foot for bunion. The patient was a man about forty years of age, in whom the condition of the foot, which had existed for many years, gave rise to much difficulty in walking, and on two occasions had caused suppuration. The metatarsal bone was removed by means of a bone forceps through an incision on the dorsum of the foot. The incision was closed with black silk, the wounds united in less than two weeks, and the patient was now able to get about with comfort and had a movable joint.

ULCERATION OF THE STOMACH; DEATH FROM HÆMORRHAGE; OBSCURE SYMPTOMS.—Dr. B. ROBINSON presented a specimen from a man about fifty-eight years of age, who entered the hospital in a state of partial mental alienation. He had been suffering for four or five months from difficulty in breathing and palpitation. There were œdema of the lower extremities, some albumin in the urine, double pleuritic effusion, and cardiac enlargement and dilatation. The patient remained in the hospital, without particular change in the symptoms, until November 19th, when he was observed to be very pale, and to be breathing with difficulty. In this condition he soon died. The lungs presented the appearance of brown induration; there was considerable serous effusion into both pleural cavities; the heart was hypertrophied; the stomach contained a large amount of blood, and at the pyloric orifice was an ulcer which had been the cause of rupture of a blood-vessel, from which the fatal hæmorrhage took place. It was remembered that a small amount of bloody discharge had taken place *per rectum* the evening previous. There had been no symptoms pointing to disease of the stomach during life; digestion had been good.

ABSCESS OVER THE PARIETAL BONE; MENINGITIS; DEATH.—Dr. W. P. NORTHRUP presented the skull and brain of a child, eight

months old, who, two weeks before death, presented an abscess over the right parietal bone. The symptoms were almost none, but, in looking back over the case, it appeared there had been some irritability, hyperæsthesia, and some stiffness of the neck. There was no known cause for the abscess over the parietal bone. At the autopsy the convexity of the brain was thickly coated with pus. Careful examination was made, to determine whether there had been direct extension of inflammatory process from the abscess to the cerebral membranes, but with a negative result. Other organs normal, except a fatty liver.

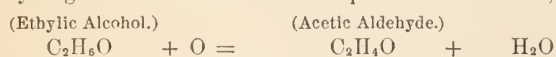
AN UNUSUALLY THIN SKULL.—Dr. J. A. WYETH presented pieces of a skull which was but little more than one sixteenth of an inch in thickness. The history was not known. The skull broke to pieces with a slight blow of the hammer. It might throw some light upon cases in which fracture of the skull was produced by slight blows, as by a thrust with an umbrella.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

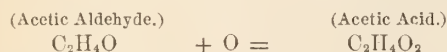
(Concluded from p. 640.)

NOTE ON PARALDEHYDE AS A HYPNOTIC.—Dr. J. C. WILSON read the following: Paraldehyde has, during the past year, been made the subject of occasional contributions from various sources to the journals. Its introduction as a drug is due to the Italians, and especially to Cervello, of Palermo, and Morselli, of Turin. It is, above 50° F., a colorless, limpid liquid, of a specific gravity of .998, boiling at above 225° F., and soluble in about eight parts of water at 52° F.

Chemically the aldehydes are bodies obtained by limited oxidation of alcohols, from each molecule of which two atoms of hydrogen are eliminated with the production of water, thus:



By further oxidation acids are produced, and these correspond in composition with the alcohols whence they are derived, thus:



In the presence of nascent hydrogen, however, aldehydes again take up their lost atoms of hydrogen and become alcohols.

Paraldehyde is formed by the action of certain acids, e. g., sulphuric, hydrochloric, sulphurous, etc., on acetic aldehyde at the ordinary temperature; it is a crystalline body below 50° F., and is a polymer of acetic aldehyde; that is, its percentage composition is similar, but its molecule is a multiple of that substance, viz:



I am indebted for information concerning this substance to the "Medical News" (July 28, and October 20, 1883), to Dr. C. L. Dana's communication in a recent number of the "Medical Record," and to Mr. Genois, of Messrs. Wyeth & Bro., from whom the specimens I have used were obtained.

The medicinal dose is from thirty minims to two fluidrachms. I have found a drachm to be the average dose for an adult under ordinary circumstances. It is to most patients disagreeable, and must be administered with a considerable draught of water. The taste and odor are ethereal and penetrating. Patients complain of this taste several hours after taking it, and may it be recognized by its odor in the breath. It is probably eliminated unchanged by way of the lungs.

Paraldehyde acts upon the cerebral hemispheres, inducing rather speedy drowsiness without preliminary excitement. "A lethal dose suspends the functions of the medulla and the respiratory center, and the action of the heart ceases after the respi-

ration." One observer (Brown) noted a slight depressant effect upon the heart in a single instance. It is stated that neither nausea, depression, headache, constipation, nor any unpleasant after-effects have followed its administration. Several of my own patients complained of the disagreeable after-taste already alluded to, and one or two of nausea.

Dr. Dana gave a pup six months old a gramme by the mouth. "The animal was at first much excited, running around and stumbling as if intoxicated. It showed no signs of pain or gastric disturbance. Its intelligence was not greatly disturbed; it came when called. Pulse ran up from 130 to 200; respiration was 20 to 24 and labored. In about twenty minutes it lay down and went to sleep. Pulse 140; respiration slower (18), and with labored inspiration. The animal was easily roused, walked around, then went to sleep again. Slept about two hours." Cervello has recently demonstrated a direct antagonism between paraldehyde and strychnine, the former diminishing the reflex excitability of the gray matter of the medulla oblongata, while strychnine increases it.

Paraldehyde has been prescribed as a hypnotic by the Italian physicians who have used it, in the various conditions calling for such a remedy, but they have found it especially serviceable in the sleeplessness of dementia paralytica, hysteria, and in other forms of disorder of the nervous system.

Dana employed it in doses not exceeding three grammes in a number of cases. In six cases it acted well as a hypnotic; in two it was helpful; in one it failed. Temporary relief of pain followed its administration in sciatica and supra-orbital neuralgia.

I have prescribed it in nine cases, with a view to its influence as a pure hypnotic.

In one hysterical patient it acted well for a short time, but lost its effect, and was discontinued. In a patient who could not sleep, after having acquired the habit of watching an invalid at night, it procured prompt and refreshing sleep. In a lady, rendered sleepless by a sudden and appalling bereavement, it caused sleep, but was abandoned on account of the nausea which followed its administration. A gentleman who had sleeplessness and great mental depression, after a debauch, and who failed to sleep for several nights after reasonable doses of the bromides and chloral, took a drachm of paraldehyde, and slept seven hours, waking refreshed and hungry. On the next day this patient, being disturbed after he had taken it, failed to sleep, but succeeded in sleeping on taking a second dose. The other cases were sleeplessness from ordinary causes, and were all more or less fully relieved. It appears to speedily require an increase of the dose.

If I may venture to express a personal view, it is that paraldehyde will prove a useful addition to our sleep-inducing drugs, but will supersede neither chloral, which it resembles in its effects, nor any others among them.

It is, like new products of the chemical laboratory, at present expensive. There is no reason why a demand for it should not cheapen it.

I thank Dr. O. Horwitz, resident physician in the Jefferson Hospital, for assistance in observing such of the cases as were treated in that institution.

NAVAL INTELLIGENCE.—*Official List of Changes in the Medical Corps of the Navy during the week ending December 8, 1883.*—MEDICAL INSPECTOR D. KINDLEBERGER, ordered to the United States steamer Hartford, Pacific Station, per steamer of the 10th inst. — MEDICAL DIRECTOR A. L. GIMON, detached from duty as member of Board of Inspection and Survey on the 15th inst., and placed on waiting orders. — MEDICAL DIRECTOR GEORGE PECK, ordered to report on the 15th inst. as member of the Board of Inspection and Survey.

Reports on the Progress of Medicine.

DERMATOLOGY AND SYPHILOGRAPHY.

By EDWARD BENNET BRONSON, M.D.,

PROFESSOR OF DERMATOLOGY IN THE NEW YORK POLYCLINIC.

PURPURA.—A discussion on this affection at a recent meeting of the British Medical Association was opened by an interesting paper by Stephen Makenzie ("Brit. Med. Jour.," Sept. 1, 1883). The point which the author mainly sought to establish was that purpura was not properly an independent form of disease, but, in all cases, a symptom, and a symptom not of any one, but of various morbid states. An analogy with œdema, jaundice, and glycosuria was pointed out, all of which represent products of disease rather than the disease itself. The writer, in describing the different forms of purpura, followed, with slight modifications, the classification of Du Castel ["Des diverses espèces de purpura," Paris, 1883], separating (1) vascular, (2) toxic, (3) mechanical, and (4) neurotic forms. The first form is very comprehensive, including all forms of blood dyscrasias, such as specific diseases, and also diseases where the blood disorder is primary and all-important, as in profound anæmia and leucocythæmia. It also included those conditions in which normal ingredients of the blood are defective (scurvy) or in excess, or where abnormal ingredients are superadded, such as bile, urinary constituents, etc. The term vascular would also apply to structural alterations or feebleness of the blood-vessels. The second or toxic group included cases in which adventitious matters gain access to the system, such as mercury, phosphorus, mineral acids, salicylic acid, quinine, the iodides, and animal venom. The third or mechanical variety included all cases due to mechanical causes, such as heart disease, feeble circulation, varicose veins, paroxysms of coughing (as in whooping cough), thrombosis of venous trunks, and "probably" also including "senile purpura." In the last (neurotic) category would fall the cases in which the nervous system is primarily at fault, thus involving cases of "tabetic purpura," occurring "in connection with neuralgia and with diseases of the nervous centers," "purpura urticans" and neurotic eruptions (e. g., herpes) becoming hæmorrhagic.

At the same meeting William Russell reported a case of purpura hæmorrhagica in which bacilli were found in hæmorrhagic spots upon the heart, underneath the exocardium. They were sufficiently abundant to cause emboli. The capillaries were not merely blocked with the fungus, but were distended by them, and in some cases ruptured. The case suggests a new pathology of purpura hæmorrhagica. Russell considers that the disease presents characters of a specific fever due to a specific poison.

A HYPERTROPHIC FORM OF LICHEN PLANUS.—Lemoine describes in the June number of "Annales de dermatologie et de syphiligraphie," a form of lichen planus occurring in a child eleven and a half years of age which he regards as identical with the form described by Besnier and Fournier as "*lichen corné*," and by Aubert as "*lichen hypertrophique*." A singular circumstance in connection with the disease was the occurrence at the same time of patches of alopecia areata upon the head, which appeared to bear such a relation to the lichen that in proportion as the latter healed the former increased, and *vice versa*. The lichenous patches occurred upon the legs below the knees in several different places, and were characterized by red papules that enlarged and coalesced to form considerably elevated patches that presented an uneven, grayish surface, traversed by the deepened furrows of the skin, producing a rough and mamillated appearance. There was some scaling from the surface, and there was moderate itching. The patches were treated by erosion with the curette, followed by the Lister dressing. Afterward,

the disease returning to some extent, frictions with green soap, baths, and applications of the soap in the form of continuous dressing, completed the cure. One of the papules, which was examined microscopically, showed much the same appearances as those found generally in lichen planus; but the epidermic layers were unusually developed, with marked thickening of the corneous layer.

It is noticeable in this case that no description is given of the characteristic papule of lichen planus with its peculiar livid, or dusky red color, suggesting the hue of a syphilitic efflorescence, and its flat or umbilicated, glistening summit. The description, however, answers very well to the appearances of the confluent, slightly raised patch that occur in lichen planus, except that the elevation seems to have been more considerable than usual. There is a class of cases occasionally observed here the relation of which to lichen planus is somewhat doubtful, and which bear some resemblance to the case of Lemoine. An irregularly shaped, sharply defined, infiltrated patch is raised considerably above the *niveau*. It is of a dusky color, resembling that of lichen planus, but its most characteristic feature is a peculiar horny roughness of its surface, due to a partial separation of epidermic scales, suggesting the feeling of a nutmeg-grater. The disease sometimes itches—sometimes as much as lichen planus, in other cases not at all. It occurs upon the lower extremities most commonly, but also elsewhere.

HERPES PROGENITALIS IN WOMEN.—A very instructive paper on this affection was contributed by Unna to the August number of the "Journal of Cutaneous and Venereal Diseases." The main motive of the article was to controvert a proposition broached at a meeting of the American Dermatological Association a few years ago that herpes progenitalis in women was of rare occurrence. Unna shows very clearly, from abundant evidence, that in "*puelæ publicæ*" it is an exceedingly common affection, becoming in them a veritable disease of vocation, while in other women there is reason to suppose that it occurs about as frequently as in the average of men. The writer takes occasion also to enter upon the subject of the ætiology of this form of herpes as well as its pathology, especially touching its relation to zoster genitalis.

FILARIA SANGUINIS.—Prospero Sonsini communicates to the "Medical Times and Gazette" (Sept. 29, 1883) a report concerning this disease as observed in Egypt. He had observed twenty-two cases in human subjects. He concludes that "filariated individuals may live long without presenting disorders of importance, and even enjoy good health." They are liable, however, during the period of their infection, "to attacks of lymphorrhagia, and especially of lymphuria, the lymphorrhagia in some cases assuming the form of lymphocele. The occurrence of one or the other complaint," he contends, "depends upon the seat of the adult worms." Hemorrhage, more particularly hæmaturia, "may also be the result of filarial parasitism, but exceptionally," due, probably, to the passage of mature filariæ into the blood-vessels. But, as a rule, hæmaturia in Egypt is generally the result, even when occurring in filariated patients, of "the co-existence of bilharzial disease."

Sonsini also examined certain of the suctorial insects supposed to be capable of communicating filariæ to man. He ascertained that in the *Culex pipiens* (mosquito), which is a common source of the disease, the developmental changes of the filaria did not take place during the colder months. They were first observed beginning in the month of March. In the cimex found inhabiting the beds of "filariated" persons, the embryos, which were found abundant at first, were afterward digested without undergoing transformation. The same was presumed to be true of the *Pulex irritans* (flea).

CICATRIZATION AND CORNIFICATION OF THE SKIN.—In the

healing by second intention of a wound affecting the cutaneous surface, two distinct processes call for consideration, viz.: the growth of granulations appertaining to the connective tissue, and the formation of a corneous envelope which appertains to the epidermis. Not infrequently these two processes fail to act in harmony, and the result is either that, while the granulations are abundant, or even exuberant, the pellicle of epidermis fails to complete the healing, or, on the other hand, the granulation process is delayed while the epidermic layer tends either to close over a cavity, or, by folding in upon itself, to produce callous, indolent edges; or, finally, it may dip down to the bottom of the unfilled excavation, with the result of a depressed cicatrix.

Of these two processes Unna has recently made an interesting study ("Berlin. klin. Wochensch.," Aug. 27, 1883). To distinguish them he has constructed from the Greek the names "dermatoplasia" and "keratoplasia," which translate the equivalent German words *Ueberhäutung* and *Ueberhornung*. It is urged that such dissimilar and evidently independent processes can not depend upon conditions that are identical. Conditions that promote one may delay the other. It has been Unna's especial study to ascertain how they may be affected by different remedies. Often, when one process is in excess of the other, a change in the local remedy will at once overcome the difficulty. Thus, a wound which has been treated with carbolic-acid dressing may have assumed an apparently perfectly healthy condition, its granulations have brought it to a level with the *niveau*, but still it fails to "skin over." Then the carbolic acid is changed, perhaps, for a dressing of boric acid, and the healing is rapidly completed. The natural inference is that the delay was the fault of the treatment. The remedy that promoted the granulation failed to promote, or deterred the process of cornification. The writer proceeds to make a division between *keratolytic* remedies—i. e., those tending to destroy or dissolve the corneous layer—and remedies that are *keratoplastic*, or productive of corneous growth. Among the former he ranks many of the so-called antiseptic remedies, e. g., carbolic acid, salicylic acid, corrosive sublimate, the bromine and chlorine compounds, acetic acid, permanganate of potash, thymol, pyroligneous acid, peroxide of hydrogen. Though in the dilute form in which they are commonly used their keratolytic properties are not often seriously developed, it is claimed, nevertheless, that their influence is always more or less unfavorable to corneous growth. With regard to certain other remedies, such as iodoform, boric acid, benzoic acid, acetate of aluminium, the balsams, subnitrate of bismuth, and oxide of zinc, it is stated that, while devoid of properties injurious to the cuticle, they are not keratoplastic in their effects. On the other hand, there are certain remedies, though comparatively few in number, that seem to have the property of promoting the growth or regeneration of the stratum corneum. Such a remedy it is claimed is pyrogallie acid. Though used in certain affections, more particularly lupus, for its escharotic effect, it has (according to Unna) the extraordinary property, at the same time that it is destroying deeper tissue, of regenerating the cuticle.

In explanation of these opposite effects of different remedies, Unna has proposed a singular theory. As is well known, most of the antiseptics above named are strong oxidizing agents, and the same is true in greater or less degree of the other materia under the keratolytic class. On the other hand, *pyrogallie acid* has very remarkable reducing or deoxidizing properties. Unna's theory is that substances that promote oxidation are stimulants to the granulating process, but are liable to hinder cornification, while remedies belonging to the class of reducing agents tend to promote the growth of cuticle, but often counteract the development of granulations. With regard to the first of these propositions, the case seems to be fairly made out, and it has been

the writer's chief endeavor to establish the second. Comparatively little is known concerning reducing agents adapted to external use. Most of them necessitate certain conditions—such as high temperature—that render them unavailable for the purpose desired. The writer, however, calls attention to several agents of this class which he claims are markedly keratoplastic in their effects. Pyrogallie acid has already been mentioned. Another mentioned is *sulphuretted hydrogen*. It is produced when the sulphur alkalis are used, and also from sulphur itself. The former are usually objectionable because too irritating or caustic to the skin. On the other hand, a strong sulphur ointment is sufficiently mild, if not too long applied, and, as is evident from the odor produced, is attended with an abundant development of sulphuretted hydrogen. Unna cites several cases to illustrate the ability of sulphur ointment to cause rapid cornification of granulating surfaces which had previously shown little tendency to develop cuticle. Another property of this ointment, which was incidentally remarked, was that of reducing exuberant granulations, which it was found to do even better than the nitrate of silver. It was found especially useful for this purpose upon the granulating surfaces on the scalp that are often so rebellious. The writer also speaks of *sugar* (a strong reducing agent) in this connection, alluding to the fact that a common and very efficient remedy for fissures of the nipple is a powder consisting of sugar and gum-arabic. In *impetigo contagiosa* he states that it (sugar) has proved in his hands to be one of the best of remedies. Chrysarobin is ranked among these remedies, and evidence of its keratoplastic properties is deduced from the well-known fact of its tendency to cause comedones and acne. It also has some reputation in the treatment of eczema, though, as in the case of sulphur, its use can not be long persisted in. *Tur* also is mentioned in this connection, and especially *linseed oil*. The writer observes that often, when fats are not well borne by the inflamed skin, this oil heals. The virtues of carron oil are largely attributed to this ingredient. Reference might also be made to the success in the treatment of *penphigus foliaceus* with linseed oil, reported by Sherwell, of Brooklyn.

Finally the writer calls attention to the importance of desiccation as a factor in cornification of the epidermis, pointing out the fact that many remedies, locally applied, promote this process through abstraction of water. In this way act many of the so-called "dusting powders," which, though commonly spoken of as "inert," according to Unna, directly aid the process of cornification, and similarly with certain astringents, such as tannin and alum, which have a sort of tanning effect upon the skin. Again, applications that compress the skin, such as the rubber bandage, tend to assist cornification by reducing the amount of watery fluid in the skin and subjacent blood-vessels. Unna, it may be observed, has maintained elsewhere that the development of the corneous layer is not due, as held by Ranvier and others, to impregnation of the epithelial cells with the peculiar substance termed by Ranvier "éléidine," and by Waldeyer "Keratohyalin," which first makes its appearance in the stratum granulosum, but asserts that the process affects only the periphery or "mantel" of the cell, and that the most important factor in this change is a process of desiccation, or, as he terms it, "Dyshidration." Hence any application to the skin that assists this process tends also to promote cornification.

[It may be well, in connection with what Unna says of the cornifying properties of pyrogallie acid, to recall the fact that Vidal, Terrillon, Lermoyez, and Hittier, who have experimented with this drug in the treatment of chancre, testify that its healing influence was confined to the destruction of the *virulence* of the sore, and that, so soon as the chancre had assumed the character of a "simple wound" level with the *niveau* ("dès que le

nivèlement du chancre est opéré"), it was necessary to discard the pyrogallie acid for some other remedy in order to complete the cicatrization. (See Brocq's article, "Ann. de derm. et de syph.," Oct., 1883.)—E. B. B.]

ON THE TREATMENT OF SKIN DISEASES BY ADHESIVE APPLICATIONS.—In the treatment of certain forms of cutaneous disease it is often desirable to confine the action of the topical remedy as strictly as possible to the immediate seat or seats of disease, and to make the application adhere so closely to the skin as to be practically immovable. The want of such a "dressing" has been especially felt in the treatment of psoriasis by chrysarobin. One of the most objectionable features attending the use of the drug just named is the brownish or purplish staining of the skin and clothing. Singularly, this staining does not usually affect the psoriatic patch, but only the surrounding sound skin, together with the under-clothing. The reason of this, as explained by Pick, is that the discoloration is the effect of the reaction of the cutaneous secretions upon the drug, the exemption of the psoriatic patch being due to the fact that in the diseased portion of skin the secretory functions are in abeyance. An equally plausible explanation, as it appears to us, would be that the presence of the loose layer of epidermis, which is always present in greater or less quantity and which is exfoliated in the process of cure, prevents the pigment from affecting the layers beneath.

By means of a dressing which will confine the chrysarobin to the diseased patches, this general staining may be entirely prevented, together, also, with the general dermatitis which this substance is liable to cause. For this purpose the ointment commonly used is unsatisfactory, for the reason that it can not be applied so as to be sufficiently immovable except by a complicated retaining dressing, which in certain situations, or when the disease is at all general, is impracticable. Plasters are for the most part inadmissible, for the reason that when they contain the drug in the desired proportion they possess insufficient adhesiveness. Dr. Fox, of this city, has suggested a paste of chrysarobin and water applied over the psoriatic patch, and then retained in place either by inclosing it in a film of collodion, or by covering it with a scrap of gutta-percha tissue, the edges of which are made to adhere to the surrounding skin by moistening them with chloroform.

The method proposed by Pick, of Prague ("Monatshefte für praktische Dermatologie," No. 2, 1883), is as follows: A portion of pure white gelatine is dissolved, over a water bath, in twice its quantity of distilled water, and, while cooling, the drug is stirred in to the desired proportion. Before the mass solidifies it is poured into a receptacle, where it hardens and forms a solid cake. When desired for use, a small portion is broken off and melted in a shallow dish placed in hot water. When liquid, it is painted over the affected part in a thin layer by means of a brush. As it hardens upon the surface it contracts, and is liable to crack, to prevent which a little glycerin is rubbed over it as it dries. It is not only in psoriasis that Pick has found this mode of application serviceable, but in various other diseases, notably dry forms of eczema and in pruritus, when, in place of the chrysarobin, salicylic acid is used in the proportion of from 5 to 10 per cent. Without this addition it is stated that the gelatine is liable to become affected with mold sufficiently to render it opaque. Generally the coating is perfectly transparent, enabling one to plainly see the diseased surface and watch the progress of the cure.

A similar method is proposed by Unna, of Hamburg ("Monatshefte f. prakt. Dermatol.," No. 2, 1883), which differs from Pick's chiefly in that Unna adds glycerin to the gelatin mixture at the start. He gives a comprehensive formulary, including a great variety of remedies. Three classes of mixtures are

described, the first containing 5 per cent. of gelatin, the second 10 per cent., and the third 20 per cent., the proportions of water, glycerin, and medicament varying. The first are described as "gelatinæ glycerinatæ mollæ," and are applied in the same manner as described by Pick. The second, termed "gelatinæ glycerinatæ duræ," are applied by pouring a few drops of hot water upon the hardened mass, by means of which sufficient of the gelatine will be softened, so that with a brush it may be painted over the affected surface. In certain of the formulæ given, water is entirely dispensed with. This is true of the formulæ for chrysarobin, two of which are given as follows:

Chrysarobin.....	5 per cent.
Gelatin.....	5 " "
Glycerin.....	90 " "
and,	
Chrysarobin.....	10 per cent.
Gelatin.....	5 " "
Glycerin.....	85 " "

In cases where the mixtures do not harden with sufficient rapidity after their application to the skin, owing to the proportions of the ingredients not being accurately adjusted, Unna sometimes covers the soft gelatin with a muslin bandage which adheres to it firmly, but may easily be removed by simply sponging the surface with water.

Auspitz ("Wiener med. Wochensch.," 1883, Nos. 30 and 31) prefers to the gelatin preparations a solution of one part of gutta-percha in ten parts of chloroform (liq. gutta-perchæ, U. S. P.), as an excipient to the remedies used, more especially chrysarobin.

The advantages claimed for it over the gelatin mixture are that its application is much simpler; that the coating which it produces upon the skin, though thinner than the layer of gelatin usually applied, is more durable, being less liable to crack, and not subject to mold, as is the gelatine. The gutta-percha being elastic, a more uniform pressure is exerted by it, and it yields readily to the motions of any part to which it is applied, more particularly about the joints. It hardens more slowly than the gelatin, so that abundant time is given to make the applications as carefully and thoroughly as may be desired. It is stated that the gutta-percha solution is entirely unirritating to the surface, and, when combined with 10 per cent. of chrysarobin, the effect of the latter is completely controlled, the surrounding skin being wholly unaffected. This combination is recommended as an efficient remedy for herpes tonsurans, eczema marginatum, and prurigo, as well as for psoriasis.

THE TREATMENT OF NÆVI.—In a paper read by Mr. William Martin Coates, at the annual meeting in August of the British Medical Association ("Brit. Med. Jour.," Aug. 18, 1883), the writer advocated for the treatment of superficial venous nævi the "now almost forgotten method of Marshall Hall." It consisted in puncturing the skin at the distance of about a line from the growth with a cataract-needle, which was then passed horizontally into the substance of the nævus in different directions, by this means inducing a slight adhesive form of inflammation in the vascular tissue, which was followed by occlusion of the blood-vessels, and finally absorption of the growth. In the center of the nævus there first appeared a small white spot which gradually spread, and in time there was left only a smooth surface, appearing a little whiter than the surrounding skin. For the bright, scarlet-colored, or arterial nævi the writer approved of a treatment similar to the above, in being merely stimulant and not destructive: A large needle, with a blunt, flattened point, was passed into the skin, previously anesthetized, and made to tear its way through the dilated blood-vessels. In this case a number of white spots appeared scattered over the nævus, which gradually spread and coalesced, and after a time,

varying from six months to two years, the growth entirely disappeared, leaving neither scar nor depression. The writer states that when the nœvus, whether venous or arterial, "exceeds a thickness of one sixteenth part of an inch, the needle operation is not applicable." In such cases he used injections of undiluted iodine tincture. The needle of the syringe should be moved about so as to inject every part of the nœvus. The operation was usually followed by some vesiculation. The white spots then made their appearance, spreading in all directions. Healing was attended with slight depression of the surface.

At the same meeting Edmund Owen recommended for the treatment of large nœvi the use of Paquelin's cautery provided with cutting blades. The latter, being heated to a dull red, are plunged into the growth at several points, care being taken, however, to keep well within the limits of the growth, since the cauterization tends to extend a little beyond the blade. "A few black sinuses, surrounded by a ring of skin which has been reddened by the scorching," remain after the operation. The next day the part looks angry and swollen, and is painful. A slight amount of sloughing takes place, and in a few days small, clean ulcers are all that mark the dwindling mass. It is said that the integument does not perish except where wounded.

THE ACTION OF HEAT ON THE VIRUS OF CHANCRE.—It is maintained by Aubert ("Lyon méd.," Aug. 12, 1883) that the virulence of the chancreous virus can not be sustained when subjected for a certain length of time to a temperature equal to the normal temperature of the interior of the human body. Matter taken from the surface of the sore was placed in vaccination tubes, and the effect of various degrees of heat carefully noted. It was found that, after exposure for from sixteen to eighteen hours to a temperature varying from 37° to 38° C.—i. e., the normal temperature of the body—the pus globules became disintegrated and the virulent properties of the matter entirely disappeared, so that it was no longer inoculable. According to Aubert, these experiments afford an explanation of the fact that the chancre poison does not penetrate the interior of the body. It is only in situations so exposed to atmospheric influences as to maintain a temperature considerably lower than that of the interior of the body that the disease is able to take root. When buboes occur, it is only the glands nearest the surface that are affected. Chancres of the neck of the womb, it is stated, are of short duration, their appearance often changing completely in twenty-four hours. Chancres of the anus are confined to the more exterior parts. With regard to buboes, associated with chancre, we should naturally suppose that they would always be chancreous or virulent in character, while in fact the simple ones are about as common in this connection as the virulent ones. The writer advances the hypothesis that when they are simple in character their inception has been accompanied with fever, involving a temperature sufficiently high and prolonged to annihilate the virulence of the virus conveyed to the inguinal glands. Again, it is asserted that, if autoinoculation be practiced during an intercurrent febrile attack, it will not succeed, though when the fever has passed it may be practiced successfully. It is suggested as a reason for the original chancre not being similarly affected during fever, that (aside from the fact already mentioned, that the region it affects is apt to be more under the influence of the surrounding temperature of the atmosphere than the rest of the body), the fact that the virus would naturally be more easily destroyed when first inoculated than after it has had time to develop or establish itself. The fact, also, is alluded to that the chancre has its virulence obliterated by an attack of erysipelas or gangrene, involving its site. On the other hand, in situations where the normal local temperature is habitually low, the chancres are most apt to be large and severe in character. Deducing therapeutic indica-

tions from these considerations, the writer aims to imitate the action of an attack of erysipelas affecting the region occupied by the chancre. His observations taught him, however, that simple heat, applied superficially, was not enough, but that this should be supplemented by an elevation of temperature more generally. To this end the patient is kept in a sitz bath, or, better, the "half" bath, at a temperature of from 40° to 42° C., for a period of several hours, the part affected by the chancre, as well as a considerable portion of that region of the body, being immersed in the warm water.

[The theory seems a pretty enough one, but we should be more convinced of its practical value if accompanied with reports of cases in which the treatment had succeeded. It should, however, be borne in mind that for phagedæna and gangrene the continuous bath has long been recognized as one of the best methods of management, but of what importance the temperature is in this connection is a question.—E. B. B.]

ANTIMONY IN SKIN DISEASES.—Considering the therapeutic value of arsenic and phosphorus in cutaneous diseases, it has occurred to Malcolm Morris ("Brit. Med. Jour.," Sept. 22) to test the cognate substance, antimony, with a view to obtaining similar effects. It was used in doses varying, according to age, from $\frac{1}{16}$ to $\frac{1}{2}$ of a grain, or of the wine from $\frac{1}{2}$ minim to $7\frac{1}{2}$ minims. In certain cutaneous affections it is stated that the results were favorable. It was found very useful in the acute general forms of eczema, and especially in that form known as *eczema rubrum*. In chronic eczema it was less successful, though exacerbations were relieved by it. *Eczema impetiginosum* was not benefited by it till suppuration had been stopped by local measures.

In that form of *erythema* which is prone to relapses, the antimony shortened the attacks and diminished the severity of the symptoms. The remedy was also found useful in the mild form of prurigo observed in England, as well as in some cases of chronic urticaria. It also appeared to do good in those cases of psoriasis in which arsenic is not well borne.

The administration of the drug was not attended by depression, diarrhoea, nausea, sweating, or other bad symptoms.

Miscellany.

ARMY INTELLIGENCE.—*Official List of Changes of Officers serving in the Medical Department of the United States Army from December 1, 1883, to December 8, 1883.*—CARTER, W. F., Captain and Assistant Surgeon. Relieved from duty at Washington Barracks, D. C., to take effect at the expiration of his present leave of absence, and assigned to duty at Little Rock Barracks, Ark. Par. 4, S. O. 224, Department of the East, November 30, 1883. — SHUFELDT, R. W., Captain and Assistant Surgeon. Now on sick leave, relieved from duty at Jackson Barracks, New Orleans, La. Par. 3, S. O. 224, Department of the East, November 30, 1883. — RICHARD, CHARLES, First Lieutenant and Assistant Surgeon. Assigned to duty at Jackson Barracks, New Orleans, La. Par. 2, S. O. 224, Department of the East, November 30, 1883.

NAVAL INTELLIGENCE will be found on page 672.

SOCIETY MEETINGS FOR THE COMING WEEK.—*Monday, December 17th:* Medico-Chirurgical Society of German Physicians. *Tuesday, December 18th:* New York Academy of Medicine (Section in Medicine); New York Obstetrical Society (private); Medical Society of the County of Kings, N. Y.; Ogdensburg (N. Y.) Medical Association. *Wednesday, December 19th:* Roman Medical Society (private); Medical Societies of the Counties of Alleghany and Tompkins, N. Y.; New Jersey Academy of Medicine (Newark). *Thursday, December 20th:* New York Academy of Medicine. *Saturday, December 22d:* New York Medical and Surgical Society (private).

Lectures and Addresses.

A LECTURE ON
ACUTE MENINGITIS,DELIVERED IN THE MEDICAL DEPARTMENT OF SYRACUSE
UNIVERSITY.

BY WILLIAM T. PLANT, M. D.,

PROFESSOR OF DISEASES OF CHILDREN.

GENTLEMEN: Our topic for to-day is acute meningitis, one of the most formidable of all the diseases of early life. You will find it described in some of your books under the name of acute hydrocephalus; but, while you may find it useful to remember that fact, I hope you will not use that term. It served a good purpose once, but, now that we have a better knowledge of the disease, it should give place to the more appropriate name of meningitis.

We recognize two varieties—the tubercular and the simple. The former, being much the more frequent in children, merits our first attention. Acute tubercular meningitis is an inflammation preceded and caused by a deposit of tubercle within the skull. Examination made after death reveals the tubercles, not aggregated into masses, as they so often are in the lungs and other organs of the adult, but as minute, grayish bodies of pin-head size, sometimes larger and often smaller. They may be very numerous, or so few and sparse as to be found with difficulty. The severity and duration of the illness seem to bear little relation to their numbers.

You might fairly suppose from the name, *meningitis*, that all the membranes, dura mater, arachnoid, and pia mater, share alike in the tubercular deposit and the resulting inflammation; but it is not so. With few exceptions, if any, the granulations are in and upon the pia mater, and here the brunt of the inflammation expends itself. Nor do the tubercles spread themselves over the whole extent of this membrane. Search for them ever so carefully on the convexity of the hemispheres, and you will rarely find them; but lift the brain from its bed and examine its base, and you are at once rewarded. Here, between the optic commissure and the medulla oblongata, you may find the tubercular granulations in more or less profusion. Usually some may be found along the lower part of the sides of the hemispheres, as also in the processes of pia mater that dip down into the sulci between the convolutions. The membrane is often found thickened by an opaque, grayish infiltration that has been regarded as “confluent tubercle.”

Besides the tubercles and infiltration, you will find some of the concomitants and results of the inflammation, as hyperemia of the membrane and contiguous parts, flakes of lymph, and often serum and pus. Almost always there is adhesion, so that when the pia mater is peeled off it brings some of the brain substance with it. The inflammation may have invaded to some extent the brain itself, which will then present changes in color and in texture. It is common to find the fluid in the lateral ventricles somewhat augmented; occasionally the increase amounts to a quarter of a pint or more.

Quite generally, but not always, meningeal tubercle is associated with tubercle in other parts of the body, notably the peritonæum and the lungs.

Whatever may contribute to produce a tubercular diathesis in a child may become a cause of this disease. Heredity is a chief cause. The offspring of consumptive and scrofulous parents are specially liable to it. Impure and confined air, want of healthful exercise, and insufficient food and clothing, are powerful contributory causes. The recession of moist cutaneous eruptions is thought by some to be a cause. I have no doubt that there is some connection between the disappearance of such eruptions, especially if about the head, and this disorder. It is frequently secondary to other diseases, especially to measles and whooping-cough.

Symptoms.—Dr. Robert Whytt, of Edinburgh, whose admirable description of this disease was first published in 1768, two years after his death, divided it into stages, and his example has been generally followed by other writers. Not that there are distinct stages with sharply defined boundary lines; you are not to look for that, but rather for a gradual change and succession of symptoms answering to the progressive character of the malady.

With this understanding, we will follow the usual course and consider, first, a stage of invasion. From the stand-points of diagnosis and treatment, professional interest centers in this stage. He is a skillful diagnostician who, in the half-revealed and inconstant phenomena of the first days, can unerringly recognize the foe he has to meet. It is only at this time, too, that there is any hope at all of success from medical treatment.

You are called, then, to see a child between one and seven or eight years old, for this malady, like many others, is infrequent during the first year, and after the eighth or tenth the liability is greater to pulmonary phthisis than to meningitis. Perhaps the parents may have noticed that for some weeks, or even months, the child has been losing weight and color and spirit; that it has been easily fatigued and easily fretted; that it has been, for a child, too much inclined to silence and sadness; that it has been sleepy by day and restless by night. Frequently, however, these prodromous symptoms, if present at all, have not been sufficiently pronounced to attract notice.

The little patient does not seem to you to be very ill, but it has lost its usual animation and sprightliness, and it no longer finds pleasure in its toys. If old enough, it may complain of headache; if not so old, it may manifest its discomfort by carrying its hand to its head. It is apt to reel in walking, and it may be observed sometimes to come to a sudden pause and look about as if bewildered or surprised. When lying down it may cry out that it is falling, and beg to be taken up. These phenomena are doubtless due to vertigo. It inclines to drowsiness, and, when disturbed, is petulant and spiteful. When questioned, it replies in monosyllables, if, indeed, it replies at all. Its very silence is ominous of the coming storm. It prefers darkness, or rather twilight, to light, and instinctively closes its eyes and turns its face away when brought before a lamp or window. The eyes are unnaturally lustrous, and the

pupils, even thus early, are apt to be contracted. The hearing is often morbidly acute, and loud noises are distressing. At night the sleep is fitful and disturbed. Grinding of the teeth is frequent from spasm of the masseter muscles. Twitching of other muscles is common, and there may even be general spasms. Indeed, at any period of the disease there is a liability to general convulsions, and occasionally they occur at the onset. The temperature is somewhat raised, but is probably not above 101° . Very likely the pulse is a little accelerated, though it is sometimes slackened even thus early.

Constipation is an early symptom, and usually attends the whole course of the disease, excepting, it may be, the very last days. In a few instances there has been diarrhœa at the beginning, but of short duration, and followed by abiding costiveness.

Another early and important symptom is vomiting. Often it is one of the first things noticed, and the child is thought to have a disordered stomach. It is repeated several times, in most cases during the first few days, and is sometimes so urgent as to interfere with nutrition. Raising the child from the recumbent posture frequently excites it. I would have you make note of the fact that vomiting is not present in every case, as has been asserted by some writers. I have known of several instances in which it was altogether absent. Barrier found it absent in about a fifth of the cases observed by him. It does not usually attend the latter part of the disease, and frequently disappears after two or three days.

Though the general temperature is somewhat raised, the face is commonly paler than natural, excepting now and then when a transient redness steals over it. Such are the ordinary phenomena of invasion. Not all of them are present in every case, and no one of them is specially characteristic. It is only through assiduous watching of the patient and weighing all the symptoms that you can arrive at an early diagnosis. The mistake is often made of pronouncing a commencing meningitis remittent or typhoid fever. Again and again I have committed this error, though resolving each time to be more wary in the future. The ophthalmoscope is sometimes employed for the early detection of the disease. When retinal congestion and miliary granulations within the eye can be demonstrated, all doubt is removed. But some cases of meningitis are unattended by retinal changes, and then this test is valueless.

But by the fifth or sixth day, if not sooner, the symptoms become so pronounced and characteristic as to compel a reluctant revision and correction of the diagnosis, if we have previously been mistaken. The inflammation, now fully developed, progresses rapidly. The headache increases. Children who are old enough often cry out, "My head, my head!" Why the pain should often be referred to the top of the head and the forehead, when the inflammation is mainly at the base, I do not know. In some instances the ear, the back of the neck, or, curiously enough, even the abdomen, is the seat of excruciating pain.

Characteristic symptoms of this middle period are found in the pulse and respiration. Slowness and variability distinguish the pulse. A decline of twenty or thirty or more

beats is not unusual, but it does not remain constant to any figure, being slower at one time and faster at another. It is also irregular as to rhythm and strength. In many cases there is a lapse of every fourth, or sixth, or eighth beat. It is affected by slightest causes, and a trifling movement or excitement will surprisingly increase its rate. The slowing of the pulse is not, I believe, present in every case; but variability and more or less irregularity are, so far as I know, constant symptoms at this period.

Irregularity and inconstancy also mark the breathing during this middle stage of meningitis. One moment the inspirations may be equal and natural; at another they may cease altogether, and that for so long as to excite fears of a permanent suspension of the function. This will be followed, perhaps, by a hurried gasping, as if to atone for time lost. Occasionally there is a deep and prolonged inspiration—a sigh. Yawning is likewise a frequent symptom. These peculiarities of pulse and respiration are doubtless due to the fact that the roots of the pneumogastric nerves are involved in the morbid processes.

The general surface of the body is pale—so pale frequently that it looks like white marble, while upon the cheeks and forehead, and perhaps the ears, appear, at irregular intervals, bright red and distinctly circumscribed spots of congestion. These spots upon the cheeks approach the circular in form, and are from an inch to an inch and a half across. They come and go in a wholly uncertain way.

Sometimes fugitive streaks of redness flit across the pale face as fleecy clouds move over the face of the clear moon.

These spots of congestion are in striking contrast to the general pallor of the features, and contribute to give to some infants, while lying quietly in a stupor, a look of health not only, but of great beauty.

When awake, the child is oblivious as to its surroundings. At one time there may be a steady, fixed gaze into vacancy, and a well-guarded silence, giving place, when disturbed, to a spiteful look and a petulant cry; at another time there may be an active, garrulous delirium.

By degrees the eyes assume appearances that signal the work of destruction going on within the skull. One of these is a permanent squint affecting one or both. When in a stupor, the balls, turned upward under the drooping lids, may be seen to move with feeble oscillations. From time to time the lids lift and quickly fall again. The pupils, contracted at first, are now dilated, probably unequally so.

In many cases the extremities are very cold, while the extreme heat of the head is made evident to the hand, but these are not constant symptoms.

There is a curious and unexplained symptom mentioned by most writers; that is, retraction of the abdomen. The bowels seem to retire toward the backbone, making a deep, tray-like excavation, above which the iliac and pubic bones and the cartilages of the ribs rise up like promontories. This condition is spoken of as the "boat-shaped abdomen." It is said to be present at some time in almost every case, and may appear early or late in the disease. If there is co-existent tubercular peritonitis, it will, of course, be absent.

During this middle period of the disease many children utter at frequent intervals a solitary, sudden cry, half scream and half squeal, so peculiar and characteristic as to have received long ago the name of "hydrocephalic cry." Meningitic cry would be a better term.

Jerking of muscles, before alluded to as a frequent feature of the invasive stage, becomes more marked in this. Through it, counting of the pulse may be interfered with, and the face may be thrown into momentary grimaces. Tremors run through the frame, and tonic contractions cause rigidity of certain parts. Sometimes the head is drawn and held back, but to a moderate degree only, by stiffness of the nuchal muscles.

Gradually the increasing stupor merges into coma, paralyzes of various parts supervene, and we pass, by insensible degrees, into the third and closing stage. General and special sensibility are now abolished, and the child can not be roused from its lethargy. The strabismus continues and the eye-balls become hazy, because no longer kept moist by winking. The pupils become more dilated, and entirely unresponsive to light.

Flakes of lymph collect on the margins of the lids and at the inner angle of the eye, requiring frequent removal.

The pulse, but lately so slow and halting, is now bounding along at a reckless, but more regular and equal pace, making often in the last days from 150 to 200 strokes a minute.

The breathing, too, like the pulse, but later, becomes rapid and more regular. Toward the end it is apt to become very noisy from tracheal and bronchial râles. Convulsive and automatic movements continue in parts that are not paralyzed. Chewing and sucking, and up and down movements of a leg or an arm, are common. The sphincters of the bladder and rectum becoming paralyzed, the urine dribbles away, and an offensive looseness follows the constipation of the earlier periods. Hemiplegia sometimes occurs; I have known one leg and arm to lie motionless for some days before death. General convulsions are imminent, and may bring the sad scene to a sudden close. But in most instances death lingers. The coma and insensibility become absolute; the pulse disappears; respiration becomes more labored and noisy; a copious sweat stands upon the surface; the lividity deepens, and, after several days of watching for the end, the child dies quietly. Authors assert that there is occasionally an unexpected waking from profound coma, when the little one recognizes its friends, and even handles its toys, but only to fall back, after a few hours at most, into a lethal sleep.

The ordinary duration of tubercular meningitis is between one and three weeks, but it may be so violent as to destroy life in two or three days, or so mild as to continue for many weeks.

The prognosis is the gravest possible. So few cases of recovery have been put on record that these have been considered by many as open to a suspicion of mistakes in diagnosis. It is true that trivial disorders of digestion do in some children create symptoms that simulate pretty closely those of meningitis, and that the cerebral and nervous phenomena of typhoid fever and pneumonia have often led practitioners into error. But the probability that attacks of

real tubercular meningitis have been recovered from is strengthened by the fact that in quite a number of instances the children have subsequently succumbed to this disease or to phthisis pulmonalis. If we count all the reported recoveries as genuine, the showing, after all, is but a sorry one. After the middle period, I think you will never be mistaken in prophesying a fatal ending.

A few words as to the *simple* or *non-tubercular* form. It is, as I before intimated, rare as compared with the other. It is as frequent in adults as in children, and, as it will be fully treated of from the chair of practice, I shall give but little space to it. It is less regular in its course than the tubercular form, and is frequently more rapid and violent. When it occurs from injury to the head, or from the extension of inflammation from other structures, as the ear, there may be almost at once convulsions and other symptoms of the fully developed disorder, and in three or four days, or even less, it may have run its fatal course.

The inflammation is apt to be more diffused than in the other form, and after death the convexities of the hemispheres and their inner surfaces are usually found overlaid with pus and fibrinous membrane. Associated with spinal meningitis, it sometimes occurs epidemically, attacking large numbers of persons of all ages and conditions.

While the mortality of *simple* meningitis is very large, the prognosis is less certain than in the other form, since mild cases do occasionally end in recovery.

Treatment.—We now come to the discouraging matter of treatment. Everything has been tried with pretty uniform success. Up to a recent date the methods pursued with tubercular meningitis were not only heroic, they were torturing. Bleeding, local and general; large blisters or croton-oil to the shaven scalp, and calomel, frequently in enormous doses—these were the agents employed to overcome and expel the demon. But they never did it, and most of the profession now advocate more humane if not more successful procedures. If you are so clever as to recognize the disease at its invasion, there is a little hope. The child should be kept quiet in a darkened room, and spared all occasion of annoyance and fretfulness. The diet should be as nutritious as the patient will take. Milk, cream, and meat broths are best. A hot foot-bath fortified with mustard lessens the cerebral congestion and soothes the child. I would use it as many as four or five times in the twenty-four hours. Keep the feet and legs warm by bottles of hot water, or other means.

Both reason and experience favor cold applications to the head. If there is a heavy growth of hair, it should be thinned, and cloths, not too thick, wrung from iced water and changed often so as to make constant impression of cold, may be laid upon the head. When there is intense heat of head, bladders of pounded ice may be applied. This is a powerfully depressing measure, and should not, I think, be used in infants or weakly children. When employed, some layers of cloth should come between the ice and the scalp.

Correct constipation by any agreeable laxative, but be chary of much physic, for the chance of success is not made better, but rather the worse, by hypercatharsis.

About the only drug that seems to have anything in its favor as making for recovery is iodide of potassium. Roeser suggested it in 1840. It has been extensively used since then with occasional benefit, or apparently so. Quite a number of cases of recovery under it, but discouragingly few as compared with the whole number of cases, have been reported from entirely trustworthy sources. It should be early and continuously given in doses of from .12 to .3 grammes—2 to 5 grains. To relieve the headache and ward off convulsions, bromide of potassium is our best remedy. When there are extreme restlessness and discomfort, you will find it of service to combine chloral and bromide. Ordinary doses will often fail of appreciable effect. Give them boldly until your purpose in giving them is effected. Valerian, in fluid extract or other form, tends to quiet the muscular twitching and the general restlessness. In most cases it is better to dispense with opiates, since they increase cerebral fullness, constipation, and the growing tendency to stupor. But in certain cases the agony is so great that they may, and should, be freely used, even hypodermically.

By the early and persistent employment of such means as these you may possibly save your patient, and then, in your surprise, you will ask yourself whether, after all, your diagnosis was not erroneous.

The prophylactic treatment of tubercular meningitis promises more than the direct. To prevent so terrific a malady is better than to cure it, even if we could cure it. A child with inherited tuberculous or scrofulous tendencies should be well looked after, especially if it begins to exhibit those vague but growing evidences of poorliness that are so often precursory to this affection. Cod-liver oil should be given, a half-teaspoonful or more t. i. d. The diet should be nutritious—the best that can be digested. Stimulants are in order—bourbon or brandy with milk. Mild exercises out of doors, that interest and amuse without fatiguing, should be provided. Change of air and scene is often of signal service. If there are moist eruptions about the head and face, I would not attempt to dry them by local applications, but rather trust them to disappear with the improvement in the general condition.

Original Communications.

REMARKS ON THE TREATMENT OF IRREDUCIBLE HERNIA BY OPERATION.*

By WILLIAM T. BULL, M.D.,

SURGEON TO THE NEW YORK AND ST. LUKE'S HOSPITALS.

WITH the confidence inspired by success with antiseptic wound-treatment many surgeons have been encouraged to revive operations which had been discarded, and to perform them with success. Among such none have attracted more notice than the operation for the radical cure of hernia.

Various methods of operation, involving the incision and subsequent suture of the structures concerned in ruptures, have been adopted, and have yielded a varying degree of success. Leaving out of consideration minor modifications, these methods, which have been termed "modern radical operations," may be reduced to three—viz.: 1. Closure of the abdominal aperture of the hernia (Steele and Marcy). 2. Closure of the neck of the sac by ligature or suture (Nussbaum). 3. A combination of the two procedures (Czerny).

Reports of operations and a number of papers* have accumulated the experience of nine years, and we can form a good notion of the value of these operations by studying the elaborate statistics compiled by Dr. Leisrink, of Hamburg. It will be sufficient for my purpose to call attention to the results of the operation for all cases not strangulated—i. e., reducible and irreducible. Of these there have been operated on, by one or the other method, 202 cases (169 inguinal, 25 femoral, 8 umbilical and ventral), with 15 deaths, which gives a death-rate of only 7.4 per cent. Nine deaths were due to septic poisoning, which represented a death-rate of $4\frac{1}{3}$ per cent. from this cause. The percentage of relapses, or cases in which no cure was obtained, is large. Details are not given in all cases, but of those reported there are found 20 $\frac{1}{2}$ per cent. of relapses. Of thirty-two patients who experienced relapse, a decided improvement was claimed in 80 per cent. Of the patients operated on for inguinal hernia, in 60 per cent. it was irreducible.

These figures show that the operation is attended with danger (7 per cent. mortality, $4\frac{1}{3}$ per cent. deaths from sepsis), and that it fails to effect cure in 20 per cent. of the cases, while at the same time it holds out decided hope of improvement. It can therefore hardly be recommended to patients with hernia that can be controlled by a truss. These persons are comparatively comfortable with a truss, and their condition is free from danger, if they exercise proper care; and, if any operation is attempted for their cure, it should be one without risk, such as the cure by Heaton's method of injection. The subjects of irreducible hernia, on the other hand, or at least a large majority of them, suffer frequent inconvenience, and are in constant danger of serious accidents. If the hernia contains intestine they are generally unable to wear a truss, and have dragging pain on exertion, and frequent intestinal disturbances. They are liable to inflammation of the protruded viscera, or to the occurrence of strangulation of additional intestine. With an omental hernia some persons can wear a truss, especially if the pad be "concave"; but they rarely do this with comfort. Without its support there is generally a feeling of weakness, inability to make more than moderate exertion without pain, and there is just the same liability to or danger of the accidents of strangulation or inflammation.

These are the cases for which I believe the modern operations are desirable, and should be recommended when the simpler measures—such as rest in bed, restricted diet,

* For the literature of the subject we should consult "Die moderne Radical-Operation des Unterleibsbruches," by Leisrink. Hamburg: Leopold Voss, 1883.

* Read before the New York Surgical Society, November 27, 1883.

repeated taxis and compression of the hernia—have failed. I have operated in all the cases which have come under my notice in the past three years, and with success. They are three in number.

CASE I.—*Irreducible Inguinal Omental Hernia; Excision of Omentum, Ligature and Excision of the Sac; Recovery.*—A housekeeper, aged forty-seven, in good general health, was sent to me by Dr. Gibney for an irreducible inguinal hernia of the left inguinal region of six weeks' duration. The rupture had existed for ten years in a reducible condition, and had never given any annoyance till it became fixed, when the presence of a truss became unbearable, and she had pain on making moderate exertions. Several ineffectual attempts to reduce it without anæsthesia had been made. The swelling was over the site of the external abdominal ring on the left side, of the size of a small egg, doughy in feel, dull on percussion, tender on pressure, and no fluid was found on puncture. Her general health was unaffected. After four days' rest in bed, with poultices applied at frequent intervals, the tenderness disappeared, and the swelling became softer. An attempt to reduce it under ether did not succeed, and an operation was recommended. On March 8, 1882, she entered St. Luke's Hospital in the same condition as before. Under ether and with the spray the sac was opened by an incision three inches in length, and found to contain a mass of omentum adherent to the sac at some places. At the neck of the sac it was as large as the little finger. It was drawn down, tied off with a carbolized-silk ligature, and the stump returned to the abdomen. The sac was then pulled down, its neck sewed up with fine catgut, and the rest excised; the wound was united by a few catgut sutures and one silver wire, with lead plates. A carbolized-peat dressing was applied. Recovery was interrupted by a retention of secretion in the wound, which gave rise to slight fever, local tenderness, and vomiting on the third day. These symptoms disappeared promptly on relieving tension by opening the skin wound, and the entire wound healed by granulation under carbolic-acid compresses, without further general or local disturbance, in four weeks. Six months afterward, though the woman had discarded the truss given her on leaving the hospital, there was no sign of return and no unpleasant symptoms.

CASE II.—*Irreducible Inguinal Omental Hernia, extending into the Labium Majus; Excision of Omentum; Ligature and Excision of the Sac; Recovery.*—A widow, thirty years of age, and a seamstress by occupation, had been prevented from going out of the house, and at times even from moving about the room, for six months before she was sent to me from the Hospital for the Ruptured and Crippled. The rupture appeared three years before in the left inguinal region as large as a pea, and had gradually increased to the size of a man's thumb without ever being reduced. It gave her little trouble till about six months before I saw her. At this time she consulted a truss-maker, who made repeated efforts to fix a truss over the swelling, which he called a "gland." She could bear no pressure, and was unable to move about freely without pain. The swelling was three inches in length, extending from the external abdominal ring into the labium of the left side, irregular in its outline, soft to the feel, dull on percussion, irreducible, but giving an impulse in coughing at the upper part, and tender on moderate manipulation. Her general health was good.

An operation was recommended, which was performed at St. Luke's Hospital, April 6, 1882. This operation was without spray, but with other antiseptic measures. The incision, three inches in length, exposed the peritoneal sac, which was opened and found to contain a tongue-like process of omentum, which was atrophied opposite the neck of the sac. This was tied with

carbolized silk just about its thinnest part, cut off, and the stump returned to the abdomen. The hernial sac was then isolated, drawn down, its neck ligated with catgut, and the wound in the suprajacent tissues of the labium extended through the greater part of the labium majus. Six sutures were put in the upper part of the wound, which was now four inches in length, the lower part being placed in apposition by small peat-bags (with iodoform). A peat and iodoform dressing was applied. The wound healed under two dressings, except a narrow granulating strip, which was cicatrized by the twelfth day. A truss with a light spring has been worn since, though there is no protrusion, and the patient feels perfectly well.

CASE III.—*Inflamed Irreducible Scrotal Hernia (Epiptocèle); Drainage of the Sac; Antiseptic Treatment with Spray; Recovery.*—A laborer, aged forty, came to the Chambers Street Hospital suffering from abdominal pain and vomiting, which had begun twenty-four hours before admission. He called attention to a large scrotal hernia of the right side which had been irreducible for five years. How long it had existed he could not tell. The hernia was of the size of a cocoanut, and covered the upper third of the thigh. There was no tension, and the finger could be passed into the abdominal aperture on its upper surface. The surface was smooth, and tympanitic over the lower part; it was dull and doughy above. It was *not* decidedly tender. There was no impulse, and no impression could be made on it by taxis, but "gurgling" was produced. The man could not tell whether it was any larger than it had been for years past, but thought it got larger while he was at work and before the vomiting began. He had slight abdominal pain, no tympanites, pulse 100, temperature 99° F., surface warm. He had been constipated for several days, but it was his habit, and he paid no attention to it. He stated, too, that he had had several attacks like this before, lasting two or three days. At the expiration of twelve hours morphine had been injected hypodermically three times, and ice applied to the tumor, and his condition was about the same. He had, however, vomited several times, but only the contents of the stomach.

Fearing the approach of strangulation, I decided to attempt taxis under ether, and, this failing, to cut him. Taxis was tried for fifteen minutes without success. An incision three inches long was then made, and the tissues external to the sac divided. Taxis was again tried unsuccessfully. There seemed to be, however, no constriction about the neck of the sac, for the finger could be passed into the abdominal ring. The incision was extended, the sac opened, and found to contain some turbid serum, not offensive, a loop of large intestine slightly congested (it was barely changed in color) and distended with gas, and some small intestine not congested, forming a mass as large as a big fist, which was adherent to the bottom of the sac. It was held in a club-shaped mass by adhesion of the serous coats at its narrowest part. These bands and the adhesions to the sac were torn through, and about twenty carbolized-silk ligatures applied to bleeding points. Both loops of intestine were then replaced. The abdominal ring admitted all the fingers, and the tissues overlying the sac in its vicinity were adherent and thickened. I therefore did not ligate the sac, for fear of injuring the spermatic cord, nor attempt its extirpation, in order not to extend the wound into the cellular tissue of the scrotum. But a counter opening was made at the bottom of the sac and the wound sutured with silk, two drainage-tubes being inserted. Lister dressing was applied. There was but slight shock from the operation. The wound healed entirely in four weeks, with but moderate suppuration and slight fever (101.5° F.), but there was marked local peritonitis from the sixth to the tenth day. The bowels moved on the second and fourth days naturally, and there was no more vomiting. The man was discharged at the

end of two months, wearing a Heaton bandage, and has not been heard from since.

It will be noticed that I have followed only the one method, that of ligature and excision of the sac, and that is the only one, from what I have read of the operations of others, that I should be willing to recommend. The apertures can not be first pared and then sewed up without increasing the risk of the operation, and, from what we know of the liability to ventral hernia after wounds of the muscular parietes, there is no reason to believe that we can effectually close up an orifice surrounded by aponeurotic structures. I see no objection to the attempt to *diminish* the size of the orifice in this way, but I believe it of doubtful efficiency. I should think it wisest to adopt the *safest* operation for an irreducible hernia, which will make it reducible. A truss will then control it, and at a later date I should endeavor to diminish or to close the abdominal aperture by the injection method.

While the statistics quoted above give one a general idea of the risks of the operation, it will be apparent to all that these will vary with the conditions of each individual case. A small omental hernia in a woman is a safe thing to cut into, and a large intestinal hernia in a man a very dangerous one. In the same way the ligature or the excision of the sac in one case may add a trifling risk, in another a very great one. Drawing down the peritoneal pouch, cutting it across, and causing it to unite, is the chief object to be accomplished. The remainder can be left (and drained) if its removal would leave a wound with many chances of septic infection. If not, it should be excised.

I have spoken of this operation only in connection with irreducible hernia. It is proper, however, to state, before closing, my convictions as to its employment in strangulated cases. Leisrink's tables show the mortality after operations for strangulated hernia to be as follows: Of 186 cases, there were 33 deaths, giving a mortality of $17\frac{2}{3}$ per cent. This compares most favorably with the rate of mortality in the days before antiseptic surgery was adopted; for the statistics of Luke, Malgaigne, Textor, South, and Gosselin show a death-rate varying from 32 per cent. to 80 per cent. As to the duration of the strangulation, the modern operations with antiseptic treatment show:

Twenty-three cases operated on within 50 hours, 2 deaths, $8\frac{2}{3}$ per cent. mortality; 21 cases operated on after 50 hours, 7 deaths, $33\frac{1}{3}$ per cent.; while with the older methods we find (Gosselin's statistics) 25 cases operated on within 50 hours, 8 deaths, 32 per cent.; 41 cases operated on after 50 hours, 23 deaths, 65 per cent.

This, indeed, convinces me that it is safe enough to add to the ordinary operation for strangulated hernia the measure I have referred to above. In other words, I would urge ligation or suture of the peritonæum at or above the neck of the sac in every case of strangulated hernia, and excision of the sac besides, or its drainage, according to the circumstances of the case. In four operations performed within the last two years—three for inguinal and one for femoral hernia—I have both ligated and excised the sac; and the wounds have healed promptly and without constitutional disturbance.

OBSERVATIONS ON HYDROCELE,

FOUNDED ON AN ANALYSIS OF ONE HUNDRED AND FIFTY CASES.*

By ROBERT ABBE, M. D.,

SURGEON TO THE OUT-PATIENT DEPARTMENT OF THE NEW YORK HOSPITAL;
CONSULTING PHYSICIAN TO THE HOSPITAL FOR THE RUPTURED AND CRIP-
PLED; ATTENDING PHYSICIAN TO THE HOUSE OF MERCY.

IN reviewing the notes of over one hundred and fifty cases of hydrocele, treated by me in private and at the New York Hospital during the past four years, I will not cite statistics, which I find show no essential difference, in the proportionate frequency of this, that, or the other form, from those established by writers on this subject. But I will cite a few cases of special interest, and note what points of management seem of practical importance to me.

In infancy one sees acquired hydrocele along the cord or in the tunica-vaginalis sac, or those communicating with the abdomen, "congenital," so called.

Most of them, if left alone, would be cured by nature in the course of time, but the anxiety of the parents or the interests of the practitioner demand some interference. As a rule, the simpler this is, the better. I have had them disappear rapidly under the continued application of evaporating lotion, which, as it is inevitably bound on with the clothing, acts not by evaporation, but by stimulation.

In one eight-months baby, badly nourished, and with diarrhœa, a good-sized double hydrocele was rapidly reabsorbed when the child's condition was toned up by change of diet, which checked the diarrhœa.

Long-standing infantile hydrocele commonly yields to puncture. The best method is to hold three or four surgical needles side by side between the finger and thumb, and, while making the scrotal sac tense, rapidly repeat the puncture stroke, pricking as many as thirty or forty points. Through the stellate puncture of the surgical needles the fluid quickly escapes into the cellular tissue, and some through the skin, aided by gentle squeezing.

Endeavor to evacuate the sac thus, and the fluid left under the skin is quickly absorbed.

Some cases I have followed a year or two where one acupuncture cured.

Hypodermic aspiration is a simple, and, in time, effective remedy, but, as a rule, has to be often repeated. Two cases of hydrocele of the cord were each cured by one aspiration; one of them contained two ounces, in a child of five years.

The seton is effective, but, unless removed at just the right time, say after thirty-six hours, it will set up a disagreeable suppuration of the sac, necessitating incision.

In the way of medication, I have seen hydrocele in children of six months to two years disappear on the administration of iodide of potash, 2 gr. t. i. d., for two or three weeks, the diminution in fluid beginning soon after treatment was begun.

In the case of one child, whose hydrocele I frequently aspirated, a cure took place only after circumcision for phimosis and preputial adhesions, after which the hydrocele

* Read before the New York Clinical Society, June 22, 1883.

got well spontaneously, and, one year later, the sac was still dry.

In hydroceles of adults I have noticed, with few exceptions, what is not noticed in the text-books, that an induration of the epididymis co-exists, either as a hardness of its entire body, or of the globus major or minor alone, showing a very subacute, painless, inflammatory action. This can be noticed only after tapping.

A word regarding encysted hydroceles.

These are developed in the cellular plane investing the epididymis, and probably originate from an obstructed seminal duct. The fluid is invariably as colorless as water (strongly in contrast with the straw-colored fluid of the ordinary variety), or slightly milky from the spermatozoa in suspension, which soon form a sediment on standing. In some cases we find, on microscopical examination, living spermatozoa.

The encysted hydrocele is said to be almost always small—half an ounce to two ounces or so—though Curling says he has seen one as large as twenty ounces.

Among quite a number of this variety I have seen two much larger than that—one of thirty-eight ounces, and another enormous one of forty-eight. The latter was in a man of fifty years; had developed during five years; colorless fluid; spermatozoa in action. Waited two months after tapping, till it had filled to fifteen ounces, when, after tapping, I injected half an ounce of tincture of iodine. One year later no trace of fluid or thickened sac remained. It was cured. In the patient sixty-three years old, with a thirty-eight-ounce hydrocele of this form, of seven years' standing, there was one of three ounces on the other testicle also. Spermatozoa were abundant in the fluid. One drachm of tincture of iodine was thrown into each sac after tapping, and a little inflammatory fluid returned in a month or so, as is usual, but was reabsorbed, and, one year later, both sacs were dry.

Thus, as I have found in smaller encysted hydroceles too, Curling's statement, that this form is not cured by iodine, is disproved. I think, in fact, that its cure is almost certain.

This variety I have found exclusively in old gentlemen from fifty to seventy years. In one patient of seventy it began fourteen years before, immediately after his wife's death, when he became continent. It grew to fifteen ounces; fluid colorless, spermatozoa abundant.

A number of smaller encysted hydroceles have remained as perfect cures by the iodine injection.

Dark fluid hydroceles are apt to contain either blood or cholesterin, and I have thought the former sometimes degenerated into the latter, as illustrated by a twenty-five-ounce cyst in a patient of seventy years, giving a sediment of blood and spermatozoa and sperm cells when tapped in October, 1879, but when next seen and tapped, in June, 1883, yielding fluid containing cholesterin crystals in abundance. Suppuration of the sac followed simple tapping, and a small slough occurred at the puncture point.

I have seen two cases of thickened sac, with cholesterin crystals in the fluid, suppurate freely after tapping, and believe the irritation of the crystals escaping in the course of the puncture set up irritant action. This accident, however, does not always follow evacuation of such fluid, as shown in

a ten-ounce hydrocele carried eight years by an old gentleman, the fluid of which deposited one fifth of its bulk of crystals. No suppuration followed tapping.

CURATIVE TREATMENT.—First. By internal administration of iodide of potassium in selected cases, cure may be brought about after tapping, where there is well-marked induration of the epididymis. The power of this drug to produce absorption of plastic exudation or chronic induration is well recognized, even where (as is most often the case) there is no syphilis suspected. Of course, if this disease does exist, potash *must* be used. I have record of a case of double hydrocele, ten ounces on each side, where the testicles were both somewhat enlarged and hard. The man proved syphilitic, and but one tapping, followed by medicine, cured him.

Second. Injection with iodine will, if rightly used, be a competent curative method in most cases. I have resorted to it about forty times, and note the following points:

There is almost always some little shock after injection. The pulse commonly falls from 80 to 60 or 50 beats for a few minutes. Some pallor is usually shown, and a good deal of pain experienced, following the course of the vas deferens.

I have once seen very profound shock. The patient was sixty-six years old, and had an old hydrocele of ten ounces, which I evacuated, and had injected but half a drachm of iodine when the patient showed prostration, pallor, and collapse; became pulseless, and was restored only after half an hour of stimulation by whisky, ammonia, and hot bottles.

I should prefer not to use the iodine injection in a patient with weak heart.

Occasionally, for some unaccountable reason, a case is utterly rebellious to this method of cure, as in a man of twenty-one years, whose hydrocele had been injected with iodine, three times in seven years, by Dr. Fowler, of Albany, and Dr. Otis, of New York, and no impression was made on it. To test the matter, I did it with thoroughness the fourth time, and also failed to cure it.

After iodine injection one expects first an accumulation of some inflammatory fluid, rapid for a week or so, then slow, and finally a reabsorption, leaving the sac dry.

Third. Injection with pure carbolic acid, as demonstrated by Levis, of Philadelphia, has taken rank as probably the best method of radical cure of hydrocele.

I have resorted to it in about a dozen cases, and find that its two decided advantages are, that it gets up a grade of *plastic inflammation* different from and better than that by iodine, and that it is almost always painless and gives *no shock*. The pulse never varies after the injection. I have had but one man complain of pain, and he for three minutes said his "testicle felt as if it was in a frying-pan." After operation the patient usually keeps at his work. There is less reaccumulation of fluid, and more often a plastic lymph that can be felt in the sac.

One drachm of deliquesced crystals should be thrown through the cannula, distributed in the sac, and left.

The scrotum should be well greased, to prevent the caustic action of the acid on the skin if a drop or two of it escapes from the cannula.

I once injected three drachms into a large sac and had acute suppuration follow, requiring incision, which, of course, cured the hydrocele effectually. I used too much. One drachm will always suffice. Carbolic-acid poisoning never follows this injection.

Finally, I regret to report one death following the simple operation of tapping without injection.

An old and feeble book-agent of temperate habits of life was tapped by me three times in 1879 for a hydrocele of twelve ounces. No reaction followed, but in the next year, after a simple tapping, there ensued acute inflammation of the sac, and phlegmonous cellulitis of the scrotum, with fatal exhaustion, due to his enfeebled condition.

It was the only serious result of over one hundred and fifty cases, representing, perhaps, five hundred tappings.

VULCANIZED PESSARIES

FROM PLASTER-OF-PARIS CASTS.

By C. A. LEE REED, M. D.,

PROFESSOR OF OBSTETRICS AND GYNÆCOLOGY IN THE CINCINNATI COLLEGE OF MEDICINE AND SURGERY.

In an issue of the "New York Medical Journal" some months ago there appeared the synopsis of a report by Dr. Dawson, of New York, on "Plaster-of-Paris Pessaries." The method employed by Dr. Dawson, according to my recollection, consisted in packing the upper portion of the vagina with absorbent cotton saturated with a mixture of plaster of Paris in water. This packing was permitted to harden in the vagina, when it constituted a firm, efficient pessary *fitted* to the parts it was intended to occupy. The procedure impressed me favorably as embodying the principle of adjusting a pessary with such nicety that it would not distort the vagina and interfere with nutrition by exerting undue pressure at any particular point. I accordingly adopted the suggestions of Dr. Dawson in my practice, but I soon discovered that the very principle for which he contended was defeated by the methods he employed—or, at least, that I employed in accordance with what I remembered to be his suggestions. The act of packing the vagina implies the application of a pressure which, if persistent, as in the case of a pessary, becomes, or is liable to become, the source of serious trouble in the cellular tissue. But other objections soon became manifest:

1. The method of application implied and effected undue distortion of the vagina and adjacent tissues.

2. As a consequence of the foregoing, nutrition was disturbed and cellulitis was sometimes developed.

3. The pessaries thus formed absorbed secretions to such an extent as to become fetid and septic in a remarkably short time.

4. In cases of dilated vaginae, the amount of material required to form a pessary that would be self-retaining was so great that its weight became an objection to its use.

To overcome these objections, and yet take advantage of the principle of scientific adjustment, I was induced to apply the plaster in a different manner. A mixture of plaster of Paris in water was made of such consistence that it could be readily drawn into the barrel of a metallic syringe, the

distal end of which had been cut off for the purpose. This instrument, loaded with the plaster, was passed into the vagina by the aid of a Sims's speculum and the plaster discharged, the syringe being gradually withdrawn as the plaster was projected into the vagina. The patient was kept in the recumbent posture until the plaster had had time to "set." In subsequent cases I avoided this detention in bed by packing in the bottom of the syringe some dry absorbent cotton, which was discharged with the plaster, and which formed an effectual plug, serving the threefold purpose of preventing the escape of the plaster from the vagina, forming a cushioned lower extremity to the plug, and preventing the formation of disagreeable sharp corners. After twenty-four hours the plaster was removed, the cotton torn away, and a hole drilled lengthwise to permit of cervical drainage.

The object in applying the plaster in this form was to have a mass that, when thrown into the vagina, would yield to the natural contractility of the walls of the canal and thus become adjusted strictly *in situ naturale*. In this I succeeded, so that when the pessaries were returned, after being perforated as indicated above, they were invariably worn without the slightest difficulty.

They, however, became fetid, and in some cases were too heavy. To overcome the former objection I coated them with shellac, but that failed to prevent absorption. Then, to overcome both the absorption and the weight, I concluded to use the plaster pessary as a mere cast, which I took to a dentist and had reproduced in rubber just as he would vulcanize a plate for a set of teeth. The result was a pessary with which I was satisfied, and the development of a line of practice which I have since found of great value.

A few final observations may be of interest to those who may have a fancy to try this line of practice.

1. In cases of displacement the uterus should, of course, be replaced before the plaster is applied.

2. This treatment is utterly impracticable in those cases of version and flexion in which there is not sufficient cervix within the vagina to afford leverage.

3. As a rule, the attempt to take a plaster cast of the vagina should not be made in cases of cellulitis, although I have seen mild cases of this sort decidedly benefited by the procedure. The plaster is a powerful astringent and an efficient alterant.

4. Ordinary cases of vaginitis offer no obstacle to the use of the plaster. I sometimes treat cases of vaginitis with a vaginal plug of plaster of Paris.

5. The plaster should remain in the vagina until the secretions have overcome its astringency, when it can be removed without violence to the epithelium.

6. Care must be taken in applying the plaster that no rough corners or horns are formed, as they are embarrassing complications in effecting the removal of the cast. If the manipulations are properly made, there is no danger from this source.

THE PHARMACOPEIA AS A LEGAL STANDARD.—A Boston firm of druggists has been fined for selling tincture of opium containing a smaller proportion of morphine than is prescribed by the pharmacopœia. It is said that an appeal will be taken to a higher court.

TWO CASES OF FATTY DEGENERATION OF THE HEART,

WITH REMARKS.

By CHARLES R. CRANDALL, M. D.,

PORTLAND, ME.

CASE I.—John B., aged fifty-four, a farmer by occupation and of temperate habits, had always enjoyed good average health up to two years before coming under observation, when he had an attack of idiopathic erysipelas, which lasted for several weeks. His recovery was slow and imperfect, and he felt that his general health had been much impaired. Three months previous to my seeing him he had what was called a "slow fever," and from this his recovery was also tedious. After these attacks he never knew what it was to be well, and he suffered more or less from the following symptoms:

He had headache much of the time, and occasionally attacks of vertigo; his breath was short, and would seem to fail upon the slightest exertion or excitement; he had a constant sense of failure about his heart, and at times vague and irregular pains; he complained, besides, that he had palpitation and a sense of fluttering in the region of his heart.

He was also a great sufferer from acidity, vomited occasionally, and had a badly coated tongue. These later symptoms, accompanied by constipation, led him to believe that he was "bilious" all the time, and induced him to make frequent use of purgatives. The general surface of the skin had a shriveled look, as if nutrition and circulation were both defective. The veins about the forehead were prominent, while those of the lips were also full, giving a cyanosed appearance to those surfaces. There was a well-defined *arcus senilis* upon the cornea of either eye.

The action of the heart was slow, as indicated by a pulse of sixty, and the first sound was feeble, while the second was well marked. There were, however, no valvular murmurs or lesions of any description. Upon percussion, it was found that the size of the heart was rather above normal, which I attributed to either the hard work he had done in the past or else an accumulation of fat.

The percussion note at the base of both lungs was slightly dull, which I explained on the theory of venous stasis due to impaired circulation. There were some moist râles in the larger bronchial tubes, but beyond this the lungs were in fair condition. The kidneys were normal, and the quantity of urine approximately about what should be expected. There had never been evidences of dropsy in any portion of the body.

The general condition of the patient was that of feebleness and general decline. He returned to his country home, and the termination of his case is not yet known.

CASE II.—Mrs. L., a married woman, aged sixty-seven, having a family grown, was large of stature, rather corpulent, and of a good history of general health up to within a few years. I was called to see her early one morning, and found that she had had several attacks of vomiting during the night, chilly sensations, more or less cough, profuse expectoration of frothy mucus, and a sense of fullness and pressure under the sternum and in the right lung. Her breathing had been rapid and difficult, and there had been a sensation in the region of the heart which she characterized as "a strange feeling" and "a weakness." I noted that her cheeks were somewhat flushed and that her lips were decidedly blue. Looking into her eyes, I detected a well-defined *arcus senilis* in the cornea of each eye. Her pulse was feeble and running at the rate of about sixty-five a minute. The extremities were cool, and the flesh yielded a decided sense of flabbiness to the touch.

On auscultation of the heart, I heard a soft, feeble first sound and a fairly marked second sound. There were no cardiac murmurs or other evidences of valvular lesions. Mucous râles were abundant in the lower portion of the right lung, while the left seemed to be in a nearly normal condition. The percussion note at the base of the right lung was somewhat diminished. The temperature was normal, and there were no symptoms of inflammatory action.

I treated her for congestion of the lungs due to heart failure, and she recovered to a considerable extent in three or four days. Her convalescence, however, was slow, and she suffered very much from general debility and shortness of breath. At times her breathing would be very feeble and irregular, and at other times would almost stop, and then become quite strong again. She complained a great deal of strange sensations in the region of the heart. At times there would be over-action, and again the sensation would be that of failure, as if the organ were about to stop. Moreover, she complained of coldness of her limbs, "creepy sensations" down her back, and of "tingling and numbness" in her left arm. One day she told me very confidently that at three different times during the last two years she had had "strange spells" which made her believe she was losing her mind. Each "spell" had occurred when she was out walking and had become rather tired. Upon each occasion her vision became dim, her mind confused, her breath short, and her limbs weak, and she would try to get somewhere to avert what seemed to her was impending death. So soon as she could sit down and get rested this alarming condition would pass away, and she would find herself panting for breath and her heart palpitating rapidly.

Under continuous treatment this patient has steadily improved, and has had a year of very satisfactory health.

My diagnosis in each of these cases was fatty degeneration of the heart, and it was based upon the signs and symptoms present as well as upon the general laws of the disease. But, before going into the symptomatology of this disease, let us note the meaning of fatty degeneration. As the term implies, the structure of the heart degenerates, and in time certain portions are transformed into an oily or fatty material. The initial point of degeneration is along the longitudinal fibers and within the substance of the muscle. At first the deposits of fat are microscopic in size, and appear as globules of oil or fat distributed along the fibers of the muscle. "It is usually most noticeable in the inner layers of the myocardium, which are particularly prone to fatty degeneration." With the advance of the disease the globules of fat increase in size, followed by a diminution and degeneration of the true muscular structure. In the early stages the deposits of fat may be more or less localized, but in advanced stages of the disease the entire organ may be involved. With increase of the fat the color of the organ undergoes change. Excess of fat in spots may give it a sort of mottled appearance. In advanced cases, where there is general involvement, there may be a paleness about the organ, or a "yellowish-brown, or buff, or muddy-pink color." When degeneration has gone on sufficiently far the consistence of the organ is markedly changed; it becomes soft and yielding, and, in advanced cases, the tissue is so utterly destroyed that it will break or mash down under pressure. Such are some of the gross lesions found in a well-marked case of fatty degeneration of the heart.

Returning now to a consideration of the causes and

symptoms of the disease, I will say that in both of my cases the age of the patient was sufficiently great to assign it as a predisposing cause. Fatty degeneration of the heart is most common between the ages of fifty and seventy. Watson teaches that it is most common at about the sixty-third year. Of eighty-eight cases collected and analyzed by Hayden, the larger number was between the ages of sixty and seventy.

Obesity is considered to be another predisposing cause. While it is not a cause upon which much stress can be laid, nevertheless, as my female patient was corpulent and flabby, I accepted that condition as a predisposition to the disease from which I believed she was suffering. Thus both patients had predisposing conditions which would naturally form powerful factors in diagnosing fatty degeneration. Both had indistinct first heart sounds, accompanied by a generally weak and irregular condition of the entire organ. Nearly all authorities lay much stress upon these physical signs when accompanied by the other general symptoms of fatty degeneration.

In regard to this point Da Costa has said: "We may, however, suspect it [fatty degeneration] if the signs of weak action of the heart—feeble impulse and ill-defined sounds—coexist with a pulse permanently slow or permanently frequent and irregular, and be met with in a person who is the subject of a wasting disease, or who has arrived at a time of life at which all the organs are prone to undergo decay. Something more than a suspicion is warranted if, in addition, there be proof of fatty degeneration elsewhere, such as an *arcus senilis*."

An important symptom at times in both cases was irregular, rapid, and difficult breathing, which was attributed to heart failure. This symptom would naturally enough be present with a feeble heart, because the circulation through the lungs must necessarily be slow, rendering the condition most favorable for venous stasis. In case second the irregular breathing was at times of the peculiar kind known as "Cheyne-Stokes dyspnea," or "the ascending and descending respiration." So common is this form of dyspnea in fatty degeneration of the heart that it was for a long time considered characteristic of the disease, but at present it is only admitted as corroborative evidence when found associated with other well-marked symptoms. As before intimated, the second patient had at times a tendency to syncope, which is a condition more or less associated with a fatty heart. The remarks of two eminent authorities on this symptom are especially worthy of citation, for they tend to explain in some degree why it is that elderly people often have "fainting spells," or have attacks which they dread as being precursors of apoplexy. Da Costa says that these patients may be "subject to seizures, during which their respiration seems to come to a standstill: and that they are liable to be stricken down with repeated attacks having the character of apoplexy save that they are not followed by paralysis." And Flint directs our attention to the fact by observing that "these patients are liable to seizures resembling apoplexy, characterized by temporary loss of consciousness, without paralysis, the surface being pallid and cool and the circulation feeble."

Both patients had well-marked *arcus senilis*. The presence of the senile arc is not given the diagnostic importance it formerly was, but, when found in elderly persons in connection with the other symptoms herein referred to, it is worthy of consideration. It usually points to degenerative changes, but modern investigation has overthrown the view that it has a pathognomonic relation to fatty degeneration of the heart. It is now believed that it may occur either with or without degeneration of the heart.

Again, both patients suffered from indigestion and what they characterized as "biliousness." This is another common symptom belonging to the group of those having a diagnostic importance. It is believed to be due to impaired circulation resulting in secondary congestion of the stomach and liver. After this state exists for a time it causes a catarrhal condition of the mucous surfaces of the organs of digestion, and there result acidity, pyrosis, flatulence, and other well-marked symptoms of indigestion.

Lastly, both patients complained of pain and other strange sensations occurring in the region of the heart. In many of the cases of fatty degeneration of the heart, patients will complain of a "peculiar feeling," of "some pain and fluttering," of "a queer feeling," of "a sense of weakness or failure," or "a sense of suffocation." Others will add also that they have a sense of fullness under the sternum, pain and numbness in the arms, and "cold and creepy feelings" down their backs. These symptoms are often encountered in elderly people, and they should always be taken as suggestive of dangerous disturbance in the heart and circulation. While it may be said that there are no one or two symptoms that are pathognomonic of a fatty heart, when one comes upon a group like the foregoing occurring in an old person, there seems but little room left for doubt.

But few words are required regarding the prognosis. In one sense it is always unfavorable, while in another it is often made favorable by regulated habits and medical treatment, which aid greatly in prolonging life. But the rule is, that, as years increase, patients thus afflicted become feeble and steadily fail. At times they sink from intercurrent disease or wear out from difficult breathing, dropsy, and debility. Again, they die suddenly from cardiac syncope or else from rupture of the heart.

"Of eighty-three cases of fatty disease of the heart, collected by Quain, sixty-eight died suddenly."

The treatment indicated is worthy of consideration, for, if well carried out, a valuable life may be decidedly prolonged.

1. Treatment should be supporting. Everything should be done to preserve muscular integrity and maintain vitality. Proper exercise, good food, fresh air, plenty of sleep, tonics and stimulants, make up the daily requirements.

2. Moderation in all things is a law that must be enforced. The penalty of its violation is rapid decline, constant distress, perhaps sudden death. Whatever exertion taxes the strength, causes mental excitement, or wearies the nervous system, may cause failure or a rupture of the cardiac walls.

3. These patients must not be housed up, for they need

the vitalizing effects of pure air, sunshine, and gentle exercise. These can be best obtained by short, easy walks and daily rides in an easy carriage. When seeking out-of-door life, exposure to cold and damp or excessive heat must be guarded against, for whatever disturbs the circulation, or prostrates, will imperil the diseased heart.

4. The diet should be nutritious and easily digested. Of the articles most appropriate may be mentioned skimmed milk, tender fresh meats, fruits, Graham or gluten bread. These are wholesome blood- and muscle-making foods, and have no special tendency to make fat.

5. Stimulants under such conditions are to be given judiciously, but nearly all these patients need them more or less. General debility and a feeble heart make a permanent demand for a mild stimulant which will help promote digestion and sustain the vital powers. In case second I found that a small quantity of sherry wine taken four times daily seemed of the highest utility in maintaining the force and regularity of the heart's action.

6. In regard to general indications for treatment, there is much to be looked after, for these patients generally suffer from shortness of breath, poor appetite, indigestion, anæmia, attacks of syncope, and headache. Hence there is the constant demand for strychnine, digitalis, caffeine, opium, iron, and quinine. These, together with wine and a regulated diet, will do much toward prolonging life.

Clinical Reports.

NEW YORK HOSPITAL.

CLINICAL REMARKS BY ROBERT F. WEIR, M. D.

Saturday, November 10, 1883.

Depressed Fracture of the Skull; Trephining.—Cancer of the Breast; Amputation.—Necrosis of Both Tibiæ; Removal.

CASE I.—GENTLEMEN: Before presenting the case for operation, I will show you a patient illustrating one of the conditions demanding the operation of trephining. A man struck him on the head with a hatchet, cutting a gash more than an inch long and an eighth of an inch wide into the right parietal bone, near the median line. Through this opening depressed bone could be felt. No cerebral symptoms developed, and the question arose whether it was worth while to submit a man feeling perfectly well in every respect, and able to walk into the hospital, to trephining, an operation attended, as you know, by considerable risk. You are doubtless aware of the fact that, in many cases in which the blow is concentrated, as in the present instance, the injury to the external plate may be slight, while a considerable portion of the inner plate may be fractured and depressed. The experiments of Teevan go to show that a pistol-ball perforating the skull cuts the outer table cleanly, while the inner table is a good deal shattered; but that, if the ball emerges on the other side of the skull, the inner table will be cleanly cut, and the outer table more or less fractured or splintered off. In the present case, believing that such a condition existed, with the double gouge, or *rongeur*, I removed a sufficient amount of bone at the seat of the injury to enable me to discover a depressed piece broken off from the internal plate, measuring one inch by three quarters, resting on the dura. This doubtless would have

given rise to serious trouble within eight or ten days had it not been removed. It was necessary to enlarge the opening farther before the piece could be removed, and then only in the manner I would always advise you to adopt—namely, after seizing the edge of the fragment with a strong dressing-forceps, or, better still, with a duck-bill forceps, making traction directly upward and outward, avoiding all tilting and twisting of the fragment. Moreover, do not try to extract it through too small a hole. By taking such precautions, you will avoid damage to the dura mater and the brain. After smoothing off the ragged edges of the opening, the wound was washed out with the sublimate solution and closed, and an iodoform dressing was applied; the patient has presented no symptom whatever since the operation, which was done a week ago. The wound has healed entirely, save where the small drainage-tube was placed. Iodoform is a very good dressing for small wounds of this kind; it does not have to be changed often, and there is only one objection to it—the possibility of producing slight dermatitis, and this can be guarded against by a layer of sublimate gauze directly over the wound.

CASE II.—This case is one of a comparatively common affection, many examples of which you see at the college, the dispensary, and the hospital clinics. The disease is cancer of the female breast. There are no special points of interest in the history: the woman is about forty years of age, married, and has no family history of malignant disease. I have alluded to this point on a previous occasion, and have told you that I am growing more and more skeptical as to any great influence of heredity in the production of this disease. The venerable Dr. Parker, of this city, came to the same conclusion, he has told me, after an analysis of over five hundred breast amputations. The trouble in this woman's breast began two years ago, as a small lump, which she disregarded until recently, when she has submitted to a number of applications, with the hope that it would be dispersed, and she would avoid an operation. The tumor is not adherent to the subjacent tissue, although the skin is glued to it and the nipple is slightly retracted. I have been unable to feel any enlarged glands in the axilla, but that is not positive evidence that the glands and lymphatics are not affected. In all these operations I open the axilla, and, if I find any of the glands increased in size, as I proceed with the operation I remove them, together with all the loose areolar and fatty tissue of this space. The disease has been shown not to recur so soon, and often not at all, in cases where the axilla has been thoroughly scooped out. Küster, of Berlin, has recently presented one hundred and thirty-two cases of removal of the breast, in the majority of which the axilla was cleaned out, and he has found that this precaution postpones the time of recurrence. In fact, in twenty-one and a half per cent. of his cases life was prolonged beyond three years, a time which by some is considered equivalent to a cure. Sir James Paget, however, maintains that ten years are necessary for the test.

The tumor here presents all the signs of hard, or scirrhus cancer. A natural question on the part of the patient generally is, how much of the breast it will be necessary to remove; and she always wishes the excision to be as limited as possible. It is a safe plan always to reply that you can not determine exactly the extent of the disease until the time of the operation, but that you will not remove more tissue than is found necessary. However, it is always well to remove the entire gland. While the thorough removal of the glands of the axilla sometimes increases the mortality as much as nine to fifteen per cent., according to different reporters, yet this fact is more than compensated for by the longer interval before the disease again manifests itself. In many instances a permanent cure has taken place. I have extirpated a portion of the pectoral muscle along with

the gland, and all the areolar contents of the axilla, exposing the vessels. Those above the clavicle are not enlarged; had they been, the operation would not have been performed, as that condition would show an uncontrollable extension of the disease. The skin, although considerable has been removed, is sufficiently lax to be approximated, and has been united over the gap by means of continued catgut sutures, and two decalcified-bone drainage-tubes have been inserted, one at each end of the wound. Over all has been placed a free supply of disinfected absorbent dressing, in the form of sublimate-jute cushions. Although, in order to guard as much as possible against recurrence, the glands and lymphatics are radically removed, do not forget that a wide portion of skin must also be taken away, even if the wound can not be closed, for return is most frequent in the skin.

CASE III.—The next case is that of a boy, fourteen years of age, who has necrosis involving the lower end of both tibiae. He gives a history of sickness dating from last winter. From the symptoms, as he describes them, it would seem that he suffered from pleurisy, which was, it is said, followed by acute articular rheumatism affecting the knee joints and eventually settling in the ankle joints. Subsequently matter was discharged from each ankle, and the boy now presents himself with several openings over the lower portion of the tibia in each leg, through which dead bone can be felt. I doubt very much whether the boy had rheumatism; it was more likely osteo-mylitis, or inflammation of the marrow of the bone, of infectious origin. The history of pleurisy and the fact that both tibiae are affected are suggestive of an infectious origin. We have lately had here, you will remember, a patient who received an injury of the skull, and osteo-mylitis of the head of the tibia, of infectious origin, resulted therefrom. This disease is apt to center at the epiphyses, and has been called by English writers epiphysitis. Occurring so near the joint, it is apt to invade the latter and disable it. You have seen several such cases already in this place, and last winter a patient was presented to the class on whom an operation was performed for removal of the dead bone, which barely fell short of the ankle joint, and he made a prompt and good recovery. It may not always be easy to determine whether a separated piece of necrosed bone is present in a given case, and, consequently, whether or not an operation is indicated; if, however, the disease has continued for six months, you may feel quite certain that, on opening the cavity, you will find dead and probably loose bone. All the diseased structure should be scraped out with sharp spoons, the cavity thoroughly cleansed, drainage established, and an antiseptic dressing applied. We have found here that there is a mere shell of healthy bone between the abscess-cavity and the ankle joint. Nevertheless, it is hoped that the disease will be arrested, and that after a time the usefulness of the ankle will be restored. The left tibia was more extensively diseased and larger than the right one, and on this side numerous pieces of grayish necrosed bone were found. On the other side, only spongy, altered, pus-sodden bone was encountered. The usual permanent antiseptic dressing was applied.

Book Notices.

BOOKS AND PAMPHLETS RECEIVED.

Klinische Vorträge aus dem Gebiete der Geburtshilfe und Gynaecologie auf Grundlage eigener anatomischer und klinischer Beobachtungen. Herausgegeben von J. Balandin, Director des Hebammeninstitutes in St. Petersburg. 1 Heft, mit xii litho-

graphischen und 1 phototypischen Tafel. St. Petersburg: C. Ricker, 1883. 4to, pp. v-125.

Transactions of the American Gynaecological Society. Vol. VII, for the year 1882. Philadelphia: Henry C. Lea's Son & Co., 1883. Pp. viii-485.

A Hand-book of Skin Diseases, and their Homœopathic Treatment. By John R. Kippax, M. D., LL. B., Professor of Principles and Practice of Medicine and Medical Jurisprudence in the Chicago Homœopathic Medical College, etc. Second Edition. Chicago: Duncan Brothers, 1884. Pp. 292.

The Dissector's Manual. By W. Bruce-Clarke, M. A., M. B., F. R. C. S., Senior Demonstrator of Anatomy and Operative Surgery at St. Bartholomew's Hospital, etc., and Charles Barrett Lockwood, F. R. C. S., Demonstrator of Anatomy and Operative Surgery at St. Bartholomew's Hospital, etc. Illustrated with 49 Engravings. Philadelphia: Henry C. Lea's Son & Co. Pp. 390.

Establishment of Tent Field Hospitals for the Treatment of the Wounded on the Field of Battle. By B. J. D. Irwin, Surgeon and Brevet Colonel, U. S. A., Medical Director, Department of Arizona. [Reprint from the "Medical and Surgical History of the War of the Rebellion."]

Beiträge zur Theorie der Wärmeempfindung. (Aus dem physiologischen Laboratorium der Harvard Universität zu Boston.) Vorläufige Mittheilung von Dr. W. P. Lombard und Dr. G. L. Walton. (Reprint from the "Centralbl. f. d. med. Wissenschaft.")

Malaria as an Ætiological Factor in New York City. By Simon Baruch, M. D. [Reprint from the "Medical Record."]

Typhoid Fever in Victoria. By James W. Barrett, M. B., Ch. B. (Melbourne University), etc. Section I. Melbourne: George Robertson, 1883. Pp. 44.

Asiatic Cholera. Being a Report of an Outbreak of Epidemic Cholera in 1876 at a Camp near Murree, in India. By Charles Moor Jessop, M. R. C. P., Associate of King's College, London, etc. London: H. K. Lewis, 1883. Pp. 47.

American Neurological Association, Ninth Annual Meeting. Reported by Wesley M. Carpenter, M. D. 1883. [Reprint from the "Journal of Nervous and Mental Disease."]

Contributo alla Disarticolazione dell' Omero. Pel Dott. G. Del Greco. [Reprint from "L'Imparziale."]

Der Torfmöos-Verband. Von H. Leisrink, Dr. Med., W. H. Mielck, Dr. Phil., und S. Korach, Dr. Med. Mit drei Abbildungen. Hamburg und Leipzig: Leopold Voss, 1884. Pp. v-42.

De la convreuse pour les enfants. Par A. Auvard, Interne à la Maternité de Paris. [Reprint from the "Archives de toxicologie."]

Correspondence.

LETTER FROM VIENNA.

The Winter Course.—A Scarcity of Anatomical Material.—Abdominal Surgery and its Results in Europe and in America.—The Manners of Vienna Students.

VIENNA, November 10, 1883.

THE winter semester is now just a month old, and the medical department of the university has never been in a more flourishing condition. The number of students is unusually large (at least twelve hundred), and several of the lecture-rooms are daily packed to their utmost capacity. So many are the first-year students that the supply of anatomical material has been

entirely inadequate, an unheard-of thing for Vienna. Even the crafty American, in spite of diligent endeavors and frequent resort to the generally effective *Gulden*, has been greatly restricted in his efforts to freshen up his anatomy. And this leads me to say, in passing, that dissecting privileges in Vienna are not all that they have been represented to be. Aside from the fact that the subjects are never injected with preservative fluid, and hence will keep but a short time, there is a curious, unscientific custom which prevails here, of lopping off a number of limbs and dealing them out separately for dissection. Add to this the difficulty and annoyance which a foreigner experiences in trying to obtain fresh material, and the necessity of renting a private room in which to work (for the Vienna medical student has very crude ideas regarding the rights of his co-laborers), and it remains a matter of considerable doubt whether it pays for a graduate to spend much of his time here in practical anatomy. He may gain in quantity, but with a proportionate loss in quality.

Surgically, there has been nothing of especial interest during the past month. Billroth and Albert hold clinics in general surgery daily. This week an ovariectomy was done by each of these gentlemen, in the public amphitheatre, but with proper antiseptic precautions. Albert operates under spray, and in a room in which the heat is unbearable. Billroth relies more upon absolute cleanliness, irrigation with carbolic acid, and the use of iodoform dressings. The mortality in both clinics is surprisingly small.

There have been a number of interesting cases in the lying-in wards since my last letter, including two of rupture of the uterus. In one instance delivery was effected by craniotomy, the child (weighing five thousand grammes) being entirely within the uterine cavity. The second case was one of extreme malacosteon, in which delivery without Cæsarean section would have been impossible. The woman had borne three children at full term and three prematurely. She was eight months pregnant, and had been in labor over twenty-four hours. When brought to the hospital she was moribund. Examination showed that the breech was presenting, while the rest of the (macerated) fœtus lay among the intestines. The contracted uterus was felt below and in front of the child. Professor Braun dissented the advisability of performing laparotomy, but rejected this extreme measure on account of the low condition of the patient. At the *Sectio Cæsarea legalis*, performed after death, the condition was as stated in the diagnosis. Strange to say, the rupture involved the entire cul-de-sac and posterior wall of the vagina, the cervix being only slightly torn. Hæmorrhage had not been excessive.

Braun has recently performed several laparotomies, the last two being for the removal of uterine fibroids. The operations were rapidly and easily accomplished, with but slight loss of blood, though in both instances the uterus was entirely removed. The *modus operandi* was briefly as follows: Having exposed the tumor by a long incision, extending one or two inches above the umbilicus, the mass was raised and its base quickly encircled with an *écraseur-chain* (the instrument generally used here is a modified Chassaignac), which was tightened, and re-enforced by a loop of rubber tubing. A bold incision was then made into the capsule of the tumor, and the growth was neatly shelled out, leaving nothing but the uterus behind. The organ itself could now be removed at leisure, the hæmorrhage being perfectly controlled, and the stump trimmed down, cauterized, and included in the lower angle of the abdominal wound. The *écraseur* was removed on the sixth or eighth day. The operations were performed in the crowded lecture-room, with no efforts at antiseptis aside from perfect cleanliness. The wounds were dressed with iodoform powder and carbolic gauze, no

drainage-tubes being used. The after-treatment does not differ from our own, and yet the results are in marked contrast. Both of the cases mentioned ended in speedy recovery, and such a termination of even the most formidable cases seems to be regarded as the rule here, rather than the exception.

I have dwelt upon this subject because of its bearing upon American peritoneal surgery. In a discussion on Mr. Tait's wonderful success as an operator, which occurred at the New York Academy of Medicine nearly a year ago, a prominent gynaecologist expressed the opinion that there must be certain unknown factors, which as yet American surgeons had failed to discover, that accounted for the difference in statistics on the two sides of the water. The difference is still more striking, and the reason quite as difficult to discover, when one studies the German methods. Something may certainly be urged in favor of the more robust class of patients which one sees in Vienna, and much is undoubtedly due to care and cleanliness during the operation; but there must be still other unknown influences which can render these crowded wards and amphitheatres safer than our carefully disinfected private operating-rooms. Nor does this apply to laparotomies only. Minor surgical gynaecology seems to be equally successful. What is more common with us than to see an elevation of temperature after a simple trachelorrhaphy, and, not rarely, in hospital practice, a sharp attack of cellulitis, a complication quite unusual here, in spite of not a little rough treatment to which the uterus is subjected? Or shall we infer that such conditions may often be present and yet be unrecognized? A good deal of credit is bestowed upon iodoform, with how much reason I am unable to say. It is certainly a convenient method of employing antiseptis.

The various courses continue to be well attended, and some of the regular university lectures are frequented by Americans, at least by such as can breathe for an hour and a half in an atmosphere as stifling as that of a police court. The German's hatred of oxygen is astonishing. He seems to drink in carbonic oxide with plant-like avidity, and blooms in the air of a lecture-room where even the fabled western medical student would quickly droop. But bad air is one of the least of the obstacles with which the fastidious foreigner has to contend in Vienna, for here bad manners flourish to a degree almost incredible. The Vienna medical student is a polyglottic, nondescript being. He may be a Russian, Hungarian, German, barbarian—almost anything except a gentleman. This idea, which at first exists only in the form of a suspicion, becomes an assured fact to a man after he has spent two or three months in daily jostlings with the aforesaid. So discourteous is the unruly student at times, so persistent is he in his determination to place his broad back between any object of interest and the rest of the spectators, that patience ceases to be a virtue, and he receives a forcible hint which even he can not disregard. But, considering the number of nationalities represented here, the students' relations are generally pretty harmonious.

Few American physicians study abroad without spending some time in Vienna. Some stay only two or three months, others, interested in special studies, may spend as many years, but probably every one remains a little longer than he had intended. There is something in the busy atmosphere of the great hospital, the society of one's countrymen and fellow-students, and, above all, in the abundance of opportunities, that is very attractive to the fresh comer, and that it is hard for one to leave behind. In some respects Vienna will probably never be equaled as a center of medical study, yet, in all departments except obstetrics, who can tell how much our own clinical advantages may be extended in a few years, so that a foreign trip may become a luxury rather than a necessity?

THE
NEW YORK MEDICAL JOURNAL,
A Weekly Review of Medicine.

Published by
D. APPLETON & Co.

Edited by
FRANK P. FOSTER, M. D.

NEW YORK, SATURDAY, DEC. 22, 1883.

MEDICAL PRACTICE AND STATE BOARDS OF HEALTH.

At various times we have expressed doubt as to the wisdom of charging a board of health with the delicate and exacting duty of administering laws regulating the practice of medicine. It can hardly be maintained that there is any obvious or natural connection between such administration and the proper functions of a sanitary board, the investigation of the causes of disease and the supervision and enforcement of measures intended to abolish or restrain their action. We have never entertained a doubt that those boards that have been charged with the additional duty referred to have regarded it as an unwelcome and distracting burden, however earnestly and conscientiously they may have labored to discharge it.

Some of the States have seen fit to charge their boards of health with the function in question, with a view, it is to be presumed, of avoiding a multiplicity of boards, and perhaps with an eye to economy. These motives, it must be allowed, are in harmony with the principles which should guide legislative bodies in providing for carrying out the policy of the State; the questions will come in, however, whether simplicity and economy of this sort are not after all illusory, and whether what is best is not in the end also the cheapest. It must be added, nevertheless, that excellent work has been done by the two boards that have been most prominent in this way—that of Illinois and that of West Virginia. No matter how we may look at the subject, on general principles, no right-minded man will question the duty of facilitating, rather than obstructing or even criticising, except on good and substantial grounds, the actual regulation of medical practice by a health board of which such action is required by law. The statutes under which the boards act have been framed in the interest of the whole people, rather than in that of the profession. From a scientific point of view, of course, this is not all that we could desire; but it should be borne in mind that the spirit of our institutions does not admit of class legislation further than what may be requisite for the common good. It is true, these laws do not invest the profession of medicine with all the dignity we should like to see hedge it about; they do not set legitimate medicine up on a pedestal and create a guard of honor to surround it. The dignity of the medical profession is best guarded within its own ranks. Therefore we should not expect any law to accomplish for the profession anything more than, with reasonable legal protection against its own vitiation, it can accomplish for itself.

There is reason to think that some of our number carry their devotion to medical science so far as to expect the law to

do something special for its advancement. This, of course, the law is incompetent to do, except in so far as such action may be required for the benefit of the people as a whole. It is desirable that this view of the matter should be spread among the profession, and we are glad, therefore, to see that some pains are taken now and then to contribute to that end. An instance of the sort is the immediate occasion of this article. We refer to a letter published in a recent issue of an Illinois newspaper.

A QUARREL AMONG SANITARIANS.

THE untutored imagination may picture to itself that, of all men, the sanitarians ought to love one another. In fact, there has been little in general to indicate that such was not the case, notwithstanding the occasional conflicts that have broken out between various boards of health and other sanitary bodies, official and non-official. As a rule, much zeal has been displayed by individual members of these organizations, not only in the performance of duties strictly official, but also in seeking to increase their efficiency by attendance at conferences, conventions, and the like. On such occasions there may have been an under-current of jealousy and a suppressed purpose to thwart each others' pet projects, although to all outward appearance the genuine student of hygiene and the covert promoter of this or that engineering scheme have been in perfect accord.

Smooth as the surface has been, however, a deep-seated contention has at length broken out. A difference of opinion as to the comparative merits of various systems of sewerage has, we are sorry to say, led to such a state of things that the secretary of the State Board of Health of Maryland, Dr. Chancellor, has felt called upon to resent certain imputations which he attributes to Colonel Waring, of Newport, and Dr. Billings, of the army. We gather from Dr. Chancellor's article, published in a recent issue of the "Maryland Medical Journal," that an engineering journal has taunted him with being an "amateur," and that between the lines he reads "Colonel Waring and his system." Furthermore, he supposes that Dr. Billings lately went out of his way to urge a particular system of sewerage upon the attention of the Mayor of Baltimore, on the occasion of his having given a lecture on hygiene under the auspices of an influential literary institution of that city, at the same time intimating that a system favored by Dr. Chancellor was condemned by sanitary engineers both in this country and in Europe.

These, to be sure, are but side issues in Dr. Chancellor's article, which in the main is a very able defense of the Liernur pneumatic system of sewerage now in operation in Amsterdam. They are the features, however, that will most attract attention. There seems to us to be no occasion for surprise that a man of Dr. Chancellor's position should show some warmth in resenting such imputations as those which he attributes to his fellow-sanitarians, but we still entertain the hope that they were not intended as reflections on his knowledge of the subject, but were rather the outgrowth of legitimate advocacy of firm convictions. It is quite possible for such convictions to lead to enthusiasm in behalf of particular methods, and even of special mechanical devices, without the slightest room for suspicion of

any prejudiced or interested bias. A sort of metonymy is apt to come into play when men suffer themselves to become thoroughly imbued with the importance of a principle, and, really striving for the principle, they seem to be intent on magnifying some particular one of its methods of application.

It is hardly to be supposed that all the apparent zeal in the pursuit of sanitation witnessed of late years has been genuine. In this sphere, as well as in so many others, doubtless the livery of the Court of Heaven has been stolen to serve the devil in. We can easily imagine the secret agent of somebody's patent trap masquerading at sanitary conventions as a hygienist. All these things may be taken for granted, and they may serve as a ready explanation of much of the minor wrangling that makes itself heard at times; but that men of such standing as Dr. Chancellor, Dr. Billings, and Colonel Waring are to be judged in the light of any such considerations, we are not ready to believe until further evidence is forthcoming. We feel confident, on the contrary, that it will be found that these three gentlemen have not in reality suffered the foundation to be laid of any breach in their concord of labor.

MODIFIED SMALL-POX INOCULATION.

DURING the late civil war, as many of our readers are doubtless aware, a medical officer of the Confederate army found himself face to face with an outbreak of small-pox, and without any supply of vaccine or the possibility of obtaining it. Under these circumstances the idea occurred to him that he might, so to speak, make it—and this was how he undertook to do it, and how, as he imagined, he did do it: He mingled small-pox virus with cow's milk, apparently with the notion that the mechanical mixture of the contagium of small-pox with a product of the animal whose system was commonly credited with the power of converting the one disease into the other would answer every purpose. With this mixture of milk and variolous matter he inoculated his men, and the result was in every way satisfactory. Not only did he shield his force from a murderous spread of the unmitigated disease, but he also confirmed his theory—in his own estimation. As a consequence of the latter circumstance, the experiment has lately been brought into notice again, and its repetition has been suggested as a legitimate and trustworthy method of obtaining a good quality of vaccinal material for ordinary use. This is why the matter seems worthy of further notice than it met with at the time.

Let us look at the consequences that might follow a general resort to this practice. We must admit that the deduction drawn by the experimenter may have been erroneous. Over and over again, in the history of the old practice of variolation, inoculated small-pox proved so benign, for long periods together, that it did no more harm than ordinary vaccination generally does. That benignity, however, never proved to be a lasting feature—it was found that it could not be depended upon. But it took time to show that—a length of time that has never been devoted to testing the conclusions of our experimenter, or even those of Thiele, Ceely, and Badcock. The

question now is, shall such a course of investigation be entered upon? Were any great practical benefit likely to be reached by it, it might be justifiable to look upon its possible dangers as proper to be encountered for the sake of the ultimate gain. When we consider, however, that the benefit must be limited to the establishment of a means of obtaining vaccine under circumstances quite unusual, and that under such circumstances a resort to variolation pure and simple is perfectly justifiable, the possibility of danger must be regarded as actual danger.

We have already said that the theory of the transmutability of small-pox into cow-pox by passing it through the cow's system, to say nothing of the superadded notion of reaching the same result by the crude expedient of a mere mechanical mixture of variolous virus with milk, has never been proved. Until it is shown beyond peradventure that variolation of the cow gives rise to cow-pox, and nothing but cow-pox, we can be safe only by assuming that the resulting disease is small-pox, with all its infectiousness preserved, however mild its actual manifestations may be even in a long series of inoculations. We should feel bound to look at the matter in this way, even if nothing more than theoretical objections could be opposed to the transmutation doctrine; but, when we are enabled to add that an experimental investigation carried out in Lyons some years ago, by a commission of which so capable an experimenter as M. Chauveau was a member, resulted in satisfying the commission that the doctrine was utterly unfounded, and that a recent study of the whole question anew by a well-known English veterinarian has tended toward the same conclusion, we must say that the probability is vastly strengthened that he who inoculates with small-pox virus, "modified" or unmodified, really spreads small-pox and nothing else. With this conviction, we must urge the utmost caution as to experiments in "modified inoculation."

MINOR PARAGRAPHS.

NEPHRECTOMY BY LAPAROTOMY.

WE learn from the London journals that Mr. Knowsley Thornton lately performed nephrectomy at the Samaritan Hospital by the abdominal incision, and that he had recourse to a procedure which he considers important as a means of avoiding septic infection—stitching the vesical end of the divided ureter into the lower end of the wound. The case was that of a young woman with a history of seven years' renal trouble. The kidney was much enlarged and sacculated, and contained a quantity of pus and putty-like material. Mr. Thornton is credited with having been the first to suggest this method of dealing with the ureter.

MEDICAL TRAMPS IN BOSTON.

At a recent meeting of a section of the Suffolk District Medical Society, of Boston, reported in the "Boston Medical and Surgical Journal," Dr. H. I. Bowditch warned his fellow-members against the wiles of a band of medical tramps at present infesting Boston and its suburbs. One of them, wearing an artificial leg, professes to be a graduate of Harvard and the son of a physician, and presents plausible testimonials. The latter have been found to be forgeries, and the man himself is a swindler. Another is a young man, elaborately dressed and of

a favorable appearance, who makes it a practice to call at a physician's house when the latter is not at home, representing himself as the son of a noted New York physician, an intimate friend of the doctor at whose door he finds himself, and stating that he has been robbed of all his money and wishes to borrow a small sum, from three to five dollars, to enable him to get home. Failing, in spite of a display of tears, to obtain the money from the person who answers the bell, he asks when the doctor will return, but is very careful not to come back at that time. Still another is a man of swarthy complexion, who pretends to be from India, but is probably an arrant cheat.

PHYSICIANS AND SANITATION.

SOME weeks ago, in an article with this title, we deprecated what seemed to be the spirit in which the "Sanitary News," of Chicago, had commented on the undue importance sometimes attached by members of the medical profession to measures for the regulation of medical practice as a part of the duties of sanitary boards. We are, therefore, very glad to be able to say now, on the authority of the excellent journal in question, that its remarks were not intended to apply with the sweeping force that we supposed. The "News" handsomely expresses its admiration for physicians who are also sanitarians—a restriction to which, taking the word "sanitarian" in its full sense, the better part of the profession will certainly agree.

HIGH APARTMENT-HOUSES.

A CERTAIN sentimental satisfaction is to be drawn from the fact that the Committee on Hygiene of the Medical Society of the County of New York has recorded its conviction of the detrimental effect of the huge and hideous apartment-houses that are springing up in such numbers. Unfortunately, neither the committee nor the society has any jurisdiction in the matter, and perhaps it is too much to expect that both the power and the inclination to abate these nuisances will be found to reside with any one of our city departments, but we mistake the temper of the community if its disgust is not yet turned into some effective channel.

A NEW MEDICAL BIOGRAPHY.

THE first part, eighty pages, of a somewhat pretentious dictionary of medical biography has just been published in Vienna and Leipsic. It is edited by Dr. Wernich and Dr. Hirsch, of Berlin. Some idea of the size of the work may be formed from the fact that the first *Lieferung* carries it no farther than the name *Albers*. Among the numerous contributors we notice but one American, Dr. Billings, of the army. In view of the well-known accuracy of Dr. Billings's literary work, we can hardly suppose that he actually wrote the few notices that appear of American physicians, for they are by no means carefully done. For example, Dr. D. Hayes Agnew is entered as "Agnew, Hayes A.," and the latest work credited to him is recorded as having appeared in 1868.

AN UNOCCUPIED CHAIR.

In the figurative language of the "Progrès médical," the chair of diseases of children of the Paris Faculty of Medicine has been "put to sleep," the faculty having allowed six months to elapse since the death of its late incumbent, M. Parrot, without formally declaring it vacant. It seems that no one has yet been found who is thought worthy to fill it. At one time a number of surgeons aspired to the chair, and there was some talk to the effect that an alternation of physicians and surgeons

was not by any means an unwise arrangement. This gave rise to a good deal of opposition on the part of the physicians, however, and the faculty, which seems to have rather favored the idea at first, found itself compelled to yield. The prospect is now that the chair will remain unoccupied until some unknown candidate shows himself obviously the best man for the place, the functions devolving meantime upon several *agrégés*.

NEWS ITEMS.

INFECTIOUS DISEASES IN NEW YORK.—We are indebted to the Sanitary Bureau of the Health Department for the following statement of cases and deaths reported during the two weeks ending December 18, 1883:

DISEASES.	Week ending Dec. 11.		Week ending Dec. 18.	
	Cases.	Deaths.	Cases.	Deaths.
Typhus	0	0	2	1
Typhoid Fever.....	20	4	22	3
Scarlet Fever	59	8	64	6
Cerebro-spinal meningitis. . .	3	3	5	4
Measles.....	35	6	44	13
Diphtheria.....	43	28	42	21

THE HEALTH OF DR. WILLARD PARKER.—We are permitted to publish the following extract from a letter from Dr. Willard Parker, Jr., dated December 18th: "In September, 1882, he 'not feeling quite well,' I made an examination of the urine, and found in it both pus and albumin. During last winter the symptoms became more marked, and afterward he had also symptoms of cystitis. The cystitis yielded somewhat to treatment, but the pus and albumin, due probably to pyelitis on the right side, have continued. He spent a comparatively comfortable summer at his home in Connecticut, but, his condition this fall appearing to grow worse, he moved to the city on the 10th of October. Since his return he has been confined entirely to his room, and for the past few weeks to his bed. He is passing a large amount of pus, and at times his suffering is intense. He is now very feeble, and while, in view of past experiences and the very great recuperative power that he has on several occasions shown, we do not regard his condition as absolutely hopeless, his advanced age (eighty-three) and great weakness make the outlook very discouraging. His mind, throughout his illness, has been perfectly clear, and even now, when not in physical pain, his interest in professional matters remains unabated. He has appreciated gratefully the many kindly inquiries that have been made for him, and it is at his suggestion and request that I now write."

So many members of the profession have reason to feel toward Dr. Parker in some sort as toward a father that they will certainly feel thankful to Dr. Parker, Jr., for the statement contained in his letter, while they will sincerely regret its discouraging tenor. For our own part, we can only repeat the hope we expressed in our last issue.

PAUPER LUNATICS IN THE STATE OF NEW YORK.—The "Tribune" publishes the following extract from a report read by the secretary of the State Charities Aid Association at its recent annual meeting: "The association has given much thought to the subject of the care of the insane, and in its visitations of county asylums and poorhouses has found very unsatisfactory conditions. Lunatics, who perhaps might be cured or improved with proper care in State hospitals, are found in strong, close cells like ox-stalls, as in Chenango County, or chained to strong iron rings in the wall of the yard, like wild animals, in Genesee, the lack of suitable care-takers obliging this recourse to restraint. In Broome County the only night attendant in the male insane wards is the watchman, whose real business

is to patrol the poorhouse grounds. In this asylum, also, the bathing is done in the coal cellar—six patients in the same water, which is then saved to wash the dirty clothes. The women's wards here, however, show the good effect of cheerful industry on the insane. On the day of the secretary's visit all the women were sewing and knitting and interested in their work. But, as a general custom, the insane in county poorhouses are kept in attics and basements and out-buildings. They are filthy and squalid, they lounge about in idleness in shadeless courtyards, and little effort is made to keep the sexes separate.

"In Chemung County cells still exist long used for insane quarters, and in one of them a man lay seventeen years unclothed, except for a ragged quilt, in a dry-goods box, on a bed of straw. Similar cells exist in the Niagara County poorhouse. In Tioga County the secretary found the insane shoeless, bare-headed, compelled to sit on the floor, and both men and women patients under charge of a male pauper. The removal of such patients to Willard Asylum proves that they can be humanized and made happy.

"The association recommends that poorhouse insane wards and county asylums should be abolished, and all classes of insane cared for by the State in cottages of moderate cost on the vacant lands of the six present State institutions. The association also urges the opening of training schools for nurses in insane hospitals."

A NEW MEDICAL SOCIETY IN ORANGE, N. J.—A preliminary meeting for the formation of a new medical society in Orange was held on Friday evening, December 14th, at the house of Dr. William Pierson, and another meeting will be held January 3, 1884, at the house of Dr. George Bayles, when, it is expected, the organization will be completed. It is thought that the new society will be styled the Orange Mountain Medical Society. The membership will include gentlemen from Summit, Milburn, Montclair, Bloomfield, and Roseville.

THE SOCIETY OF MEDICAL JURISPRUDENCE AND STATE MEDICINE.—The following-named gentlemen have been elected officers for the ensuing year: President, Mr. William Barnes; Vice-President, Dr. E. J. Bermingham; Secretary, Dr. W. E. Brill; Corresponding Secretary, Dr. J. F. Chauveau; Treasurer, Dr. E. C. Harwood; Financial Secretary, Mr. M. F. Eller; Trustees, Dr. E. C. Spitzka, Dr. C. A. Leale, Dr. J. J. Henna, Dr. J. H. Fruitnight, Dr. A. M. Jacobus, Mr. S. B. Livingston, Mr. H. W. Sackett, Mr. E. H. Benn, and Mr. D. M. Shaw.

THE NORTHWESTERN MEDICAL AND SURGICAL SOCIETY.—At the meeting held on Wednesday evening of this week, Dr. E. C. Harwood read an interesting and important paper on "The Relation of a Physician to the Commonwealth."

THE FRENCH ACADEMY OF MEDICINE has elected M. de Quatrefages a *membre associé libre*, subject to the approval of the President of the Republic.

THE UNIVERSITY OF BERLIN.—The "Medical Times and Gazette" states that the chair of comparative anatomy has been transferred from the medical to the philosophical department, being merged in the chair of zoölogy, to which Professor Schulze, of Gratz, has been appointed.

"THE SURGICAL NEWS" is the title of a new eight-pago octavo quarterly journal published in Richmond by Dr. C. A. Bryce, who is also the editor. The first number, dated January, 1884, contains two original communications and a number of selections.

AMERICAN PORK.—One of the commissioners lately appointed to inquire into the matter of the alleged prevalence of trichiniasis among American hogs is reported to have said, after

an examination of hogs in some of the Western States, that he had found much less of the disease than he had expected to meet with.

OBITUARY NOTES.

CALVIN ELLIS, M. D., OF BOSTON.—Dr. Ellis, the professor of clinical medicine, and until quite recently the dean of the faculty, in the Medical Department of Harvard University, died last Sunday, after a long illness, which he himself diagnosed as ulcer of the duodenum—correctly, as the post-mortem examination showed. The immediate cause of death was peritonitis, due to perforation. Dr. Ellis was born in Boston in 1826, and received his education wholly in that city, taking his medical degree from Harvard in 1849. He was a diligent student, a conscientious and painstaking practitioner, and a most effective clinical teacher.

THOMAS S. KIRKBRIDE, M. D., OF PHILADELPHIA.—Dr. Kirkbride, the distinguished alienist, died last Sunday, at the age of seventy-four years, at the Pennsylvania Hospital for the Insane, of which he had been the physician-in-chief for forty-three years. Dr. Kirkbride was a native of the State of Pennsylvania, and received his medical degree from the Medical Department of the University of Pennsylvania in 1832. For several years in succession he was the president of the Association of Medical Superintendents of American Institutions for the Insane, and he was so closely identified with the institution over which he presided that it was familiarly known among the profession as "Kirkbride's Asylum." His career was long, laborious, and in the highest degree honorable.

PROFESSOR ERCOLANI.—Professor G. B. Ercolani, one of the most distinguished of the modern scientific men of Italy, died at Bologna, November 16, 1883.

Count Giambattista Ercolani was born in Bologna, in 1819, of an ancient and noble family. He was the favorite pupil of the famous Antonio Alessandrini, and devoted himself early to comparative anatomy and pathology. The revolution which swept over Europe in 1849 found in him an earnest defender of the liberties of Italy, and, as a result, like Carl Schurz and Virchow, an exile. He sought refuge in Turin, and there was appointed professor, and afterward director of the veterinary school connected with the university. He remained here until 1863, when he returned to Bologna, where he accepted a similar position in the old university. By his energy and influence new buildings were erected, the school was reorganized and greatly enlarged, and a valuable pathological museum was established. He held the position of rector of the university for a number of years, and was permanent secretary of the Academy of Sciences of the Institute.

Like his friend Virchow, of Berlin, his reputation was not alone for scholastic and scientific attainments, but his early career as a defender of popular rights made him a favorite with the citizens, and he was three times elected to and served in the Roman Parliament.

His publications have been numerous, and are characterized by a careful scholarship and scientific accuracy truly exceptional. Most of his contributions appeared originally, with illustrations of the highest order, in the "Memoirs of the Academy of Bologna."

The work by which he is best known, and that promises immortality to his name, is the "Histology and Physiology of the Placenta of Mammals," in which he deduces a single law of anatomical and physiological modality of embryonic nutrition in all vertebrates. To his first publication upon this subject was awarded the prize of the French Academy. These publications were gathered into a completed treatise (a part of which was

written by the author expressly for the purpose), by Dr. Henry O. Marey, of Boston, and published in two volumes, in London and Boston, in 1880.

Professor Ercolani's researches upon the pathology of the placenta are of a value and importance scarcely second to any of the most brilliant demonstrations made in the entire field of pathological science. To the anatomist, the physiologist, and the biologist, as well as to the physician, the work of Ercolani will ever stand as a monument to "science which is pure and simple truth."

DR. HILTON FAGGE, OF LONDON.—Charles Hilton Fagge, M. D., of London, the well-known physician of Guy's Hospital, died on the 19th of November, of an aneurysm of the aorta. For several months past he had been aware of the existence of the disease, but, although he avoided the hardships of practice in consequence, he continued his professional work in other respects up to the last, and the final attack of syncope, supposed to have been owing to rupture of the sac, followed close upon his active participation in a public examination. Dr. Fagge will be remembered as the author of many notable contributions to the literature of medicine, chiefly in the volumes of "Guy's Hospital Reports" and of the "Transactions of the Pathological Society of London," and as a most successful student and teacher of medicine.

Letters to the Editor.

DR. POMEROY ON DISEASES OF THE EAR.

NEW YORK, December 17, 1883.

To the Editor of the New York Medical Journal:

SIR: In the "Cincinnati Lancet and Clinic" for December 8, 1883, p. 521, I notice a review of my book on "The Diagnosis and Treatment of Diseases of the Ear," in which my faucial Eustachian catheter is criticised somewhat unfavorably, although otherwise the book is very kindly noticed. I would beg to state that the author of the critique is in error in supposing that the danger of injecting the tympanum with this instrument is greater than when using the Eustachian catheter. For a moment, look at the facts: When the Eustachian catheter is properly introduced, its beak enters the faucial mouth of the Eustachian tube a little way, and, when fluids are injected, it is perfectly feasible to throw them into the tympanum, although this is not ordinarily intended, the object being to act only on the orifice of the tube, and perhaps a little way up toward the tympanum. With my faucial catheter the instrument is so placed in its introduction that the orifice of the instrument comes in contact with, or very near to, the orifice of the Eustachian tube, and does not in any event pass into it. With the best possible adjustment of this instrument, the fluid is thrown *against* the mouth of the tube and in the direction of its long axis.

It then obviously follows that the tympanum can not be injected by this means, except in a very fortunate and quite exceptional adjustment to the orifice of the tube. I mentioned the single case in the practice of Dr. Weir out of, perhaps, an excess of honesty, being careful not to be guilty of anything looking like special pleading.

With the immense number of times I have used this instrument in injecting fluids against the mouth of the Eustachian tube, I have never seen an otitis to result, nor have I heard of a case in the practice of another where this accident has happened, with the one exception above alluded to. I may justly infer that, practically, there is only the remotest possible chance

of such an accident happening. In regard to the difficulty of using the instrument, I would state here that I had purposely presented all the objections to its use, among which was the comparative difficulty of properly introducing it. I am quite sure that I can make an application to the mouth of the Eustachian tube several times, while the Eustachian catheter is introduced a single time. Where the velum is quiescent there is absolutely *no* difficulty in its introduction. Where the velum falls spasmodically against the posterior wall of the pharynx, there is difficulty in passing *any* instrument into the upper pharyngeal space from the throat; but, shall we refuse to pass probang, brush, porte-caustique, spray instrument, etc., into this region because it is difficult? I use my faucial catheter as much to-day as I did years since. If I oftener make a general application to the upper pharyngeal space, it is because I think, with many others, that such an application is indicated, rather than the specific application to the mouths of the tubes. I make this explanation, feeling that the author of the review in question would, had he all the facts presented to his mind, side most heartily with my own view of the subject. Very sincerely yours,

OREN D. POMEROY, M. D.

A POSSIBLE RESULT OF HOT VAGINAL INJECTIONS.

KINSTON, WARWICK, ENGLAND.

To the Editor of the New York Medical Journal:

SIR: If it is not too late, I should like to call attention to an article on the above subject, by Dr. Bradfield, in your issue of October 13th.

The first thing that occurred to me, as I read the symptoms following the injections, was that they were more likely due to the use of carbolic acid than of mere hot water. I should wish to ask Dr. Bradfield, Were there any other of the recognized symptoms of carbolism, greenish urine, etc.?

Yours faithfully,

KENNETH W. MILLICAN.

Proceedings of Societies.

NEW YORK CLINICAL SOCIETY.

A REGULAR meeting was held October 26, 1883, Dr. L. B. BANGS Chairman for the evening.

CARCINOMA OF THE LARYNX.—Dr. D. BRYSON DELAVAN related the further history of a case which he had presented at one of the meetings held last spring, prior to the performance of tracheotomy. The patient was first seen in October, 1882, and tracheotomy was performed in February, for the relief of dyspnoea, which had become extreme. The disease involved only one half of the larynx, and the question of extirpation came up at the operation, but was decided in the negative. The larynx was opened low down, and it was sought to establish adhesions, to prevent infiltration if subsequent extirpation should be deemed necessary. Very great relief was afforded by the operation, and the progress of the growth seemed to be arrested for a time. Since July, however, the patient had run down quite rapidly; he was still alive, and was able to swallow liquids slowly, although he was much emaciated and very feeble. Dr. Delavan was convinced that the man had lived much longer and been more comfortable than if extirpation had been performed. He thought division of the isthmus of the thyroid, which was not done in this case, would facilitate subsequent extirpation, and he would do it in another case.

Dr. BEVERLEY ROBINSON asked whether the intra-laryngeal appearance had been changed by the operation. He had noticed this in some cases.

Dr. DELAVAN said that the growth seemed arrested for the time, in consequence, he thought, of the parts having been put at rest.

Dr. GEORGE L. PEABODY asked if the operation of extirpation was done as often now as formerly.

Dr. DELAVAN thought it was now generally regarded as useless in carcinoma, but as capable of succeeding in sarcoma. It had now been done in about sixty cases of all sorts.

The CHAIRMAN asked what results had been obtained with tracheotomy in laryngeal phthisis.

Dr. ROBINSON said that the laryngeal symptoms often improved very much, and in some cases even disappeared entirely, but without any apparent effect on the condition of the lungs as shown by physical signs.

PERNICIOUS REMITTENT FEVER (?).—Dr. ROBINSON related a case that had come under his observation at Charity Hospital, and read notes prepared by Dr. G. C. Neiss, of the house staff. A painter, thirty-three years old, was admitted October 15th. He had been a hard drinker for a number of years, but not of late, except that he had been on a spree about a week before. He came in, as he expressed it, for "chills and fever," which he had had about six weeks. He gave the history of regular paroxysms—chill, fever, and sweating—and was suffering with a chill at the time of his admission. This was stopped by a teaspoonful of chloroform. He was given a cathartic, and was ordered an iron mixture, also ten grains of cinchonidine night and morning. At 11 P. M., while walking to the bath-room, he fell, apparently from muscular weakness. His pulse was then found to be incompressible, there was a little rise of temperature, but no chill, and he was rational. On the 17th he was delirious, vomited a greenish fluid, and complained of pain in the head, which, however, did not seem to be severe. His expression was anxious and distressed, his pupils were slightly irregular and moderately contracted, his pulse was 140, and his respiration 34. In the afternoon he was semi-comatose. The liver was found rather small, and the spleen somewhat enlarged. A movement from the bowels was said by the orderly to have been bloody. Pulse 140, full; temperature 105.6°; respiration 38. Ordered, at 3.30 P. M., a sponge-bath and ten grains of quinine, to be repeated at 5 and 7 P. M. At five o'clock the pupils were moderately contracted, and responded but little to light; the respiration was sighing, with a full breath at times, resembling the Cheyne-Stokes respiration; pulse 134; respiration 34; temperature 103.6°. At seven o'clock the patient was in a profuse perspiration. On passing a catheter, the bladder was found empty, but the bed was wet. Pulse 132; respiration 32; temperature 104.25°. Ordered: two drops of croton-oil, to be followed by ten grains of iodide of potassium, and two fluidrachms, each, of spiritus Mindereri, infusion of tritico repens, and infusion of digitalis, every two hours and a half; also, ten grains of quinine and a tablespoonful of whisky every two hours; in addition, to have two sponge-baths during the night. The patient died the next morning without there having been any special change in the symptoms.

Post-mortem Examination at 3.30 P. M.—Rigor mortis pretty well marked. Lungs somewhat œdematous, particularly at the lower part, and emphysematous. Heart somewhat enlarged, soft, and flabby; mitral valve a little enlarged. Liver, weighing four pounds, anæmic and of a dark-brown color, with pigmentation. Spleen twice as large as normal, gelatinous in consistence, and very dark in color. Kidneys: capsules somewhat adherent; light in color; anæmic; cortical striations lost in places. Intestines normal. Brain œdematous.

Dr. F. Ferguson had made a microscopical examination of the heart and kidneys, and had reported: "The muscular fiber of the heart contains much fat. There are pigment granules in the kidneys, seen in section and in teased preparations, which is characteristic of the pigmentation found in pernicious remittent fever."

Dr. Robinson remarked that he had seen the patient only shortly before his death, and that at that time there seemed to be signs of congestion of many of the internal organs. Three different diagnoses had suggested themselves to him: 1. Pernicious remittent or intermittent fever. 2. Uræmia, with congestions due to malaria. 3. Cerebral hæmorrhage, possibly into the pons, and small. From the autopsy, he thought it pretty clearly established that the case was one of pernicious fever.

Dr. PEABODY had made autopsies in two such cases, and had found marked pigmentation in the brain, liver, kidney, and spleen. The pigment was free in the vessels, and was not always found in the cells of the organs. It was very plain to the naked-eye examination. In the gray matter of the brain the vessels looked as if they had been injected. He thought pigment was found uniformly in the liver, but not so constantly in the brain. It was not usually found in the blood unless the patient had died during a paroxysm of fever. During life it might be absent in blood taken from the finger-tips; it was more likely to be found in that taken from the back, where the circulation was more sluggish.

Dr. A. A. SMITH asked whether pigment found in small quantity would necessarily show malarial poisoning.

Dr. PEABODY thought not, unless the history of the fever was also present.

Dr. ROBINSON had recently examined the blood taken from the finger of a patient from South America, who had had yellow fever in the course of the past year, and had found free pigment present.

Dr. PEABODY said he would like to add one more possibility to the three mentioned by Dr. Robinson, namely: diabetic coma. The urine had not been examined for sugar.

Dr. J. H. EMERSON raised the question whether pigment was not found in cases of malarial poisoning that could not be called pernicious.

Dr. PEABODY thought it was occasionally.

Dr. SMITH thought it was frequently.

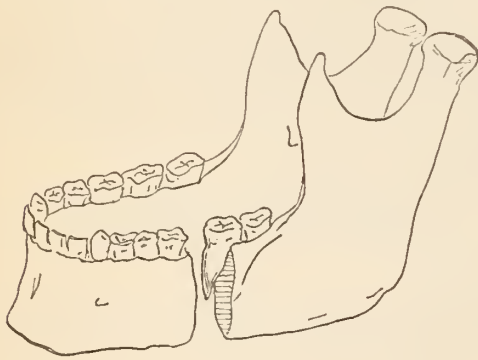
FRACTURES OF THE LOWER JAW.—Dr. ROBERT ABBE reported three cases of fracture of the lower jaw now under his care, illustrating points of interest in treatment.

The first case was that of a man, thirty years of age, who was struck by a broken cog-wheel, which made a considerable external wound, and fractured the lower jaw between the left canine and bicuspid teeth. A simple silver wire held the teeth together so well that no other appliance was needed to procure perfect union in good position. The result could not have been better.

In the second case, that of a large man of forty-five years, who was struck a violent blow on the right side of the jaw, at its angle, a vertical fracture occurred between the left median and lateral incisors. It was found impossible to retain the fractured surfaces in apposition with silver wire or with external dressings, although the man had a good set of teeth. The case exemplified a trouble Dr. Abbe had often found in such fractures, and he obtained the aid of his friend, Dr. Gunning, whose interdental splints, as well as his distinguished services in the case of the late Secretary Seward, had given him a wide reputation. Dr. Gunning applied a vulcanite cap, nicely adjusted to the crowns of all the lower teeth, back to the last molars, which, by its accurate molding (being modeled on a plaster cast of the

teeth taken from a wax impression), held the parts admirably without any fastening to the teeth, or any external dressing. This splint was undoubtedly the most accurate and beautiful of all surgical appliances for fracture of the jaw. Dr. Abbe here showed several double interdental splints, as well as the splint that had been used in the case of Mr. Seward. With the single splint, the patient inasticated and ate comfortably; with the double one, an opening in the vulcanite was left in front for eating purposes, large enough to admit two fingers side by side, the upper and lower splint being united at the sides into one solid piece.

The third case reported had been seen ten days before. The man had been kicked on the head one year before, lacerating the cheek and fracturing the lower jaw between the left first and second molars. He was treated in a Boston hospital. Small pieces of bone had come away from time to time through a large fistula, which still remained at the site of the fracture. Union had failed to follow, and a most palpable cause was discovered in the intrusion of the greater part of the second molar tooth into the space between the fragments. It was found adhering,



by its smaller fang in the gum, on the edge of the back fragment. It was readily removed, and already, in ten days, considerable solidity had ensued in the false joint. Such a cause of non-union was mentioned by some authors as very infrequent.

L. EMMETT HOLT, M. D., *Secretary*.

NEW YORK MEDICAL AND SURGICAL SOCIETY.

A STATED meeting was held November 24, 1883, Dr. B. W. McCREADY Chairman for the evening.

FATTY TUMOR OF THE FOREHEAD, WITH APPARENT FLUCTUATION.—Dr. A. C. POST presented a small tumor which he had removed from the frontal region, in a man, where it had been growing for two years past. It presented distinct signs of fluctuation, and, before its removal, was supposed to be a hygroma. It proved, however, to be a soft fatty tumor. Dr. Post believed it often impossible to distinguish by the sense of touch the fluctuation of a sac containing fluid from the apparent fluctuation of a soft solid.

KAIRINE.—Dr. A. B. BALL made some remarks with regard to certain experiments with kairine in the reduction of fever, which he was not yet prepared to have published.

In the discussion which followed, the CHAIRMAN expressed the opinion that physicians often did more harm than good in administering remedies to control special symptoms of disease. In scarlet and other fevers, quinine, for example, had been given to reduce the temperature, and it not infrequently did more harm by its depressing effects than good by its influence upon the temperature.

TYPHOID AND REMITTENT FEVERS.—Dr. BALL remarked that most of the cases sent to St. Luke's Hospital with a diagnosis of

remittent fever turned out to be cases of true typhoid fever. He did not believe that remittent fever was so common in New York as it had been represented to be. He asked Dr. Francis Delafield whether cases of the disease appeared at Bellevue Hospital.

Dr. DELAFIELD replied that there was a fair number of cases of remittent fever at Bellevue Hospital, coming from the city and the neighborhood. He knew not what else to call the affection: there was continuous fever with moderate remission in the morning, the fever being affected by quinine, not merely transitorily, but permanently, and breaking up sometimes into remittent fever.

Dr. T. F. COCK said that many parts of the city of New York, before having undergone improvements, were strongly malarious, while at present the same regions were free from malarial affections.

Dr. BALL mentioned an instance which went to show that under special conditions malaria might develop in places usually free from it. At a certain improved part of the city the ground was dug up on the lot near a family who had occupied the house for years without a symptom of malarial disease. Shortly after these improvements had been begun two of the members of the family, who had not been from home in the mean time, developed typical ague. He believed, however, that the medical mind had been taken up too much with the idea that everything febrile in New York was malarial.

The CHAIRMAN said that he was informed by a gentleman, who was in Spain during the war of 1811, that in some of the most malarious districts the soil was dry and sandy, and the atmosphere wanting in moisture.

NEW YORK SURGICAL SOCIETY.

A STATED meeting was held November 27, 1883, the President, Dr. ROBERT F. WEIR, in the chair.

THE TREATMENT OF IRREDUCIBLE HERNIA BY OPERATION.—Dr. WILLIAM T. BULL read a paper on this subject. [See page 680.]

Dr. CHARLES K. BRIDGON said that several years ago, during his term of service in the New York Dispensary, a colored child was brought there, eleven or twelve years of age, with an inguinal hernia on the right side as large as the child's head. It was irreducible, and had been so for a long time; perhaps had existed from birth. Only a portion of the contents of the sac could be reduced, and, when so reduced, there remained a band apparently passing from the upper portion of the sac to its fundus, which was supposed, both by himself and by Dr. Gurdon Buck, to be a long band of adhesion. Dr. Bridgon operated, exposed the sac, and found that it was a hernia of the cæcum. There was no meso-cæcum. The cæcum had simply slipped down behind the tunica vaginalis, and into that sac a portion of the small intestine had descended, which could be reduced, but the irreducible portion was composed of cæcum. That portion which was thought to be a band of adhesion was the vermiform appendix. With considerable difficulty this was dissected free, the entire contents of the hernial sac were reduced into the abdominal cavity, and a pad was applied. On the following day the hernia was in the same position as before the operation, having been rendered so by a fit of coughing. There was so much tenderness that he hesitated about reducing it, and allowed it to remain. An abscess formed in the scrotum which gave discharge to a small quantity of the fluid portion of the fecal matter, but nothing solid, and it continued to discharge for years afterward. The child was not at all benefited by the operation.

He had performed the operation referred to by Dr. Bull, that of tying the neck of the sac, and always resorted to it in strangulated hernia, but had his doubts as to whether it had been of service. In the cases in which he had tied it high up there had always been a necessity for the use of a truss afterward. He had also several times tried to approximate the columns forming the external ring, but without any benefit. On one occasion he excised the sac, but should never make that attempt again. It was a serious operation in a case of irreducible inguinal hernia, which was followed by a great amount of constitutional and local reaction. He thought the operation proposed by Dr. Bull, that of tying the sac and leaving the rest open to heal by granulation, was the best method to be adopted.

The PRESIDENT said he had an unfortunate experience in this direction about eighteen months ago. He attempted to perform this operation in a large irreducible inguinal hernia, as large as a child's head, which had so inconvenienced the man that he was incapacitated for any work. After the tissues had been divided and the sac opened it was found that the hernia consisted mainly of intestine, which was reduced and the sac divided, drawn together, and also the edges of the abdominal opening approximated, so as to only permit the exit of the spermatic cord, and antiseptic dressing applied. About forty-eight hours afterward symptoms supposed to be due to peritonitis developed, and the man in a short time thereafter died. The autopsy showed that the columns of the ring had been so approximated that a small portion of intestine had been forced down and nipped so as to cause intense strangulation and death of the gut. Dr. Weir, therefore, thought the point well taken that in similar cases the edges of the abdominal opening should not be approximated, and also that the sac should be divided or tied high up.

UNUNITED FRACTURE OF LEFT THIGH A HAND'S BREADTH ABOVE THE PATELLA; RESECTION; FRAGMENTS UNITED BY WIRE SUTURES.—Dr. A. C. Post presented a specimen, and said: "On the 2d of July, 1883, I was on a visit to Charlotte, N. C., and saw a man, fifty-one years of age, who had been injured by the explosion of a boiler on the 24th of June, 1882. He had a compound fracture of the left thigh a hand's breadth above the patella; also a compound fracture of the left arm near its middle, and sundry contusions of different parts of his body. He had recovered from all his other injuries, but the fracture of the thigh remained ununited. His general health was good.

"*Condition July 2, 1883.*—The limb is shortened about five centimetres. The upper fragment overlaps the lower on the outer side, and there is very free motion between the fragments.

"*Operation July 2d.*—The patient being etherized, I made a free incision over the anterior and outer surface of the upper fragment, divided the periosteum, and worked carefully on the surface of the bone with a blunt instrument, and, after a long and persevering effort, succeeded in turning out the end of the bone and removing it with a saw. The portion removed was a little more than three centimetres in length. The lower fragment was very deep and difficult of access, but I succeeded at last in exposing it sufficiently to pass a chain saw around it, and to remove its extremity, which terminated in a rounded point. The portion removed was a little less than three centimetres in length. It required much effort to bring the sawn surfaces of the fragments into contact. I drilled two holes in each segment, and wired the segments together with annealed iron wire. A plaster-of-Paris splint, previously prepared, was applied to the dorsal and lateral surfaces of the limb. Carbolic compresses were placed between the lips of the wound, which were simply drawn toward each other, and secured by a roller bandage. Over this a plaster-of-Paris bandage was applied.

"*July 3d.*—The patient had been somewhat restless and uncomfortable during the night, but I found him in a very fair condition. Pulse 84, and of good volume. Tongue clean. I did not disturb the wound.

"*4th.*—Pulse 108, temperature 101.75°. Dressed the wound. Made a large fenestra in the plaster bandage. Removed the compresses. Washed the wound with carbolic acid, 1 to 40. Dusted the surface with iodoform. Applied lint wet with the carbolic lotion to the surface of the wound, which was in a good condition. Interposed, between the skin and the edges of the fenestra, lint moistened with carbolic oil two scruples to one ounce.

"*5th.*—Condition improved. Pulse 96, temperature 100.75°. Wound in good condition. Very little discharge. No odor. Dressed as before.

"*6th.*—Still improving. Pulse 102, temperature 100°. Same dressing.

"*7th.*—Pulse 95, temperature 100°. All symptoms continue favorable.

"*8th.*—Pulse 90, temperature 99.6°. Wound looks well. Moderate suppuration. No odor. Bowels constipated. Ordered cathartic enema.

"A few days after the last report I came on to the North, and I have not seen the patient since that time. Last month I received a letter from his physician, Dr. J. P. McComb, of Charlotte, giving me an account of the further progress of the case. This letter is dated October 16th. He writes: 'The bone has united, and the wound is almost healed. He can not bend his knee much, but it is improving. He is walking on crutches. The limb is shortened about three inches. There is a large callus all around the limb. He is very grateful for his prospects of a good leg.'"

ADENO-OSTEO-CHONDROMA OF THE SUBMAXILLARY GLAND.—Dr. F. LANGE presented portions of a tumor removed from the neck of a man, twenty-three years of age, which had developed within about five years to the size of a hen's egg. In histological composition it was adeno-chondroma, with formation of true bone in small places. The operation was performed about three months ago, presented no difficulty, and will probably not be followed by recurrence of the disease, the tumor belonging to a rather benign species.

ACUTE PYEMIA OF URETHRAL ORIGIN.—The PRESIDENT presented kidneys and heart, illustrating acute pyæmia of urethral origin. They were removed from the body of an apparently healthy man, twenty-five years of age, who had been subject to gleet discharges traceable to stricture. He had had instruments passed from time to time during the summer and in the autumn. Last Sunday his attending physician introduced a sound, No. 23 French, which passed into the bladder without violence, and with no more difficulty than had been produced on all the other occasions. A few drops of blood escaped. On Monday the man was seized with a severe chill. When Dr. Weir saw the patient he had a temperature of 105° F., and he supposed it to be due to malaria, as he had known that the patient had suffered formerly from such chills, which had invariably yielded to quinine. The temperature, however, remained high, and within forty-eight hours afterward he began to develop joint pains and effusions. He complained of no distress in the bladder, but said that once or twice he had noticed that the urine was very slightly tinged with blood. The man became so delirious that he was removed to the hospital, where he died twenty-four hours afterward. Before death, evidence of pericarditis and endocarditis was detected, and the opinion was formed that it was pyæmic. At the autopsy, multiple infarctions, with grayish centers, were found in the cortex of the left kidney, the right being comparatively unaffected. Pericarditis

and recent valvular disease, with excavation at base of one of the cusps (ulcerative endocarditis), were found, and infarctions in the center of the substance of the heart. The rapidity of the course of the case was especially interesting. Dr. Weir had not seen in acute pyæmia heart lesions so distinctly marked as in the present instance. There were no lacerations of the urethra, but evidences of croupous cystitis were present.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

A STATED meeting was held December 6, 1883, the President, R. A. CLEEMANN, M. D., in the chair.

CYSTS OF THE PAROVARIUM.—Dr. WILLIAM GOODELL showed two specimens, and remarked that both patients had recovered—indeed, he had never lost a patient from whom he had removed a parovarian cyst. In both cases a correct diagnosis had been made before the operation. An interesting diagnostic point was the complete absence of the *facies ovariana*. The color of the cheeks was good, and the countenance was free from the anxious expression present in cases of ovarian tumor. One tumor had existed for ten years, the other for a year. Another important point in the differential diagnosis was, not only the flaccidity of the tumor, but its variable degrees of flaccidity. On inspection, it was seen to reach to the sternum, and seemed to occupy a large portion of the abdominal cavity, but, when the hands were placed upon its sternal edge, it could be compressed to the level of the umbilicus. An ovarian cyst, on the contrary, was hard and incompressible. Exceptions to this rule were very rare—either a tense parovarian cyst or a flaccid ovarian one. A third important distinguishing point was the long time—ten years in one of the cases—that the tumor had existed, and, furthermore, without marked deterioration of the health. After being tapped, these tumors usually filled again, but occasionally they did not, and a cure was brought about. In every case the fluid withdrawn had been limpid and generally colorless, but sometimes, in his experience, it had an emerald tint. These tumors were generally free from serious adhesions; but, if, in an operation for removing one, adhesions were found of which the forcible separation was for any reason inadvisable, or the cyst were intra-ligamentous, he would not hesitate to leave the adherent portion of the cyst-wall, or the whole cyst itself, after making a big hole in it, as the fluid it contained was bland and not irritating to the peritonæum.

Any one examining one of these cysts for the first time would consider it to be of ovarian origin, for it was only by patient research that the ovary could be found spread out over the cyst-wall. But the microscope would decide in any doubtful case. The tumor was covered with a beautiful network of veins. When a cyst of the parovarium existed on one side, the ovary of the other side was usually found diseased, and should be removed. In these cases the remaining ovary was seen to be enlarged, and the site of a small ruptured cyst was pointed out. The Fallopian tube also was enlarged, and its terminal vesicle, the hydatid of Morgagni, was likewise enlarged and cystic. This hydatid sometimes attained the size of an orange, and often ruptured spontaneously without any bad effects. A few years ago one of these small cysts ruptured while he was making an examination of the patient to ascertain its character.

VAGINAL HYSTERECTOMY.—Dr. GOODELL also showed a cancerous uterus that had been removed *per vaginam*. In view of the very fatal results of hysterectomy for cancer, he had been very unwilling to operate. In most of the cases that he had seen early enough for the operation to offer a chance of success, the patients had been unwilling to take the risk. On one occasion, when every preparation had been made to operate, the patient had a convulsion, and an examination of the urine showed

a high proportion of albumin, in consequence of which he declined to operate. About a month ago Dr. Charles W. Dulles had called him in consultation to see a patient in whom the carcinomatous condition was limited to the anterior lip, and the uterus was movable. The case having been frankly put before the patient, and all the dangers pointed out, she decided to take the risk of the radical operation. The procedure proved not to be so difficult as he had anticipated. The first step was to scrape away all cancerous tissue, and to sear the remaining surface with Paquelin's cautery. The vagina was then thoroughly cleansed. A stout thread was passed through the cervix to draw the womb down, instead of using a volsella, the handles of which would have been in the way. A circular incision was made around the cervix, and the tissues were stripped up anteriorly and posteriorly to the reflection of the peritonæum, and laterally to the insertion of the broad ligaments. Finally, the peritonæum was opened, and the womb was retroverted down into the vagina by means of an obstetric crochét passed over its fundus. A strong thread was now passed through the body of the uterus, by means of which to manipulate it more easily. The right broad ligament was then ligated *en masse*, and a second (double) ligature was passed through it and tied on the opposite sides. This broad ligament was then divided, the uterus was drawn down, and the ligament of the left side was secured and divided in the same manner. The vaginal wound was closed and dressed with iodoform and cotton. A frank peritonitis set in on the third day, and proved fatal on the fourth. The result had made him doubt whether the operation was ever justifiable; indeed, he felt disposed to avoid it whenever possible.

Dr. E. E. MONTGOMERY inquired as to the feasibility of using the galvanic-wire *écraseur* to divide the broad ligaments, keeping the wire at a low red heat and dividing the tissues slowly, thus avoiding the necessity of a drainage-tube. Another method which he had been revolving in his mind was, to dissect the uterus out with a galvanic knife, leaving the peritonæum intact, thus to a certain extent imitating Dr. Marion Sims's operation of scraping and the use of chloride of zinc.

Dr. GOODELL thought that the galvanic wire would get too hot as the loop grew small, and would then divide rapidly like a knife, involving the danger of secondary hæmorrhage. He feared, too, that the steam generated by the hot wire would penetrate the peritoneal cavity and have an irritating effect. He had a cautery battery, but he had not used it since the introduction of Paquelin's benzoline cautery, as he found the latter far more handy and manageable. He thought Dr. Montgomery's suggestion of shelling out the uterus a very good one.

OÖPHORECTOMY.—By the courtesy of Dr. W. H. Warder, Dr. MONTGOMERY showed the uterine appendages which had been removed from a young lady for the relief of dysmenorrhœa that had resulted in physical and mental failure. Menstruation had begun at the age of fourteen years, had always been painful, and had given rise to hysterical manifestations. Bathing at the seashore had at one time stopped the periods for three months; after this her health failed, her mind had been seriously affected for the last three years, and she would run away or do herself some violence at the menstrual periods if not closely watched. Examination showed the uterus enlarged and tender, and there was profuse leucorrhœa. The os uteri was dilated, the uterine cavity was scraped and cauterized with carbolic acid, and bromides, etc., were used internally, but no improvement resulted. The ovaries were removed, the day of the meeting, by abdominal section, catgut ligatures being used. The organs were very much enlarged, and contained small cysts. The abdominal wound was closed with silk sutures and covered with an impervious dressing of collodion, cotton, etc.

HYSTERO-EPILEPSY AS A COMPLICATION OF PREGNANCY.—Dr. WILLIAM H. SHIPPS, of Bordentown, N. J., sent the following communication :

"Briefly defined, hystero-epilepsy is a term applied to an abnormal neurotic condition in which are manifested certain phenomena characteristic both of hysteria and of epilepsy. Out of 276 patients confined at La Salpêtrière, Paris, under treatment for various nervous affections, 32 were diagnosed by Beau, a careful observer, as suffering from this disease. Among this number the malady assumed either a distinct or a combined form; hence he very wisely groups the cases into two classes. In the first, the hysterical seizures and epileptic fits remain distinct one from the other; to this form he adapts the term given by Landouzy, and designates it as hystero-epilepsy with distinct crises.

"In the second class, and the one of which this article furnishes an illustration, the hysterical and epileptic seizures are coeval, both developing at the same time; to this form the name of hystero-epilepsy with combined crises has been given. The object of this paper is not to enter into a consideration of the disease as it is met with in general practice, but simply to examine it as a complication of pregnancy, a standpoint from which, fortunately, we are rarely called to view it.

"During the early part of March, 1883, I was called to attend a woman said to be in a fit. Arriving at the house, I found, lying on a bed, a young woman, apparently seventeen or eighteen years of age, of fairly vigorous physique, who was striving against the united efforts of two or three neighbors who sought to prevent her doing herself bodily harm in the violence of her struggles. Examination showed entire loss of consciousness; her eyes were open and staring, the pupils were widely dilated, she was frothing at the mouth, which was then tightly closed, and her pulse was full and bounding. It was ascertained that during the day she had been visiting a friend, herself the subject of some spasmodic affection, and, while in her company, became greatly exercised over some trivial occurrence, and in this state of excitement returned home, where she no sooner arrived than she was seized with a convulsion. Her husband informed me that she was in the third month of pregnancy, and that prior to this morning she had on one or two occasions had attacks somewhat similar, though of less severity. I at once injected one third of a grain of morphine hypodermically, which in a short time was followed by a total disappearance of all spasmodic action, a state of stupor supervening, from which in the course of three or four hours she emerged apparently as well as ever. On the day following I was called to see her, and found her in a state of high nervous excitement, sobbing and deploring the presence of some impending danger which she, in her imagination, insisted was threatening her. In a short time the stage of muscular contraction, loss of consciousness, stupor, etc., took the place of the hysterical symptoms, finally terminating, as before, in a return to her normal condition.

"Without attempting to follow the case step by step, taking in all its details, and noting the many and peculiar phases through which it passed, it is interesting to note that prior to September 23, 1883, covering a period of two hundred days, not a day passed without the occurrence of one or more paroxysms. At times the hysterical phenomena would be most marked, and usher in the attack; then, again, the epileptic fit would take the precedence, always, however, accompanied by the undeniable imprint of the dual disease, hystero-epilepsy. In the inter-paroxysmal period she enjoyed, for the most part, average good health.

"On the morning of September 23d I was asked to see her in an attack of more than usual severity. When I reached the house she was profoundly unconscious, and had been so for several hours. The time for her approaching labor being near, I made a vaginal examination, but found no evidence of commencing uterine action. I ordered a hot mustard bath, mustard to the extremities, and bromides the moment she should be able to swallow. In the evening, when I again called, her condition was apparently unchanged. I then ordered a

blister to the nape of the neck, and left the patient, to return early in the morning. At 7 A. M. a messenger called, saying that the woman was now perfectly rational, and, to all appearance, in labor. I at once responded, and found that she was having bearing-down pains of moderate intensity at intervals of five or ten minutes, the mouth of the womb dilating, and the vertex presenting. I remained by the woman's side until 3.45 P. M., when the child, a healthy female weighing nine or ten pounds, was born. The labor did not differ from ordinary labors, except that it was only by the utmost vigilance that the woman was prevented falling into one of her accustomed attacks. After the birth of the child I gave it to the mother, at the same time remarking to her that, as she valued the life of the child, under no circumstances should she allow herself to have another convulsion. She promised faithful obedience, and up to the present time has not shown the slightest indication of her old trouble. It should be mentioned that, during the entire period the patient was under observation, she had daily taken large doses of the bromides and other nervines, without any effect, save perhaps in ameliorating the number and violence of the paroxysms.

"The case is interesting on account of the rarity of the disease as a complication of pregnancy, its persistence throughout the entire period, its resistance to all remedial measures, and the final disappearance of all symptoms after the termination of labor. Two queries very naturally present themselves: What was the exciting cause of the attacks? Would the induction of premature labor be justifiable in such cases? In answer to the first query, I attribute the attacks to an action upon the brain and spinal cord, reflex in its nature, and developed or excited by the fœtus *in utero*. The happy termination of the case would seemingly offer a negative to the second query; but better judgment will, I think, suggest the wisdom of the operation and the danger of refusing to employ what, theoretically at least, offers the only chance of relief. At all events, in a similar case I would most certainly have recourse to the operation, and should expect from it the best results."

Reports on the Progress of Medicine.

SURGERY.

BY CHARLES B. KELSEY, M. D.

THE ACTION OF HEAT ON THE CONTAGIUM OF SEPTICEMIA.—Mr. Dowdeswell ("Proc. of the Royal Soc.," No. 221, 1883) has been making a study of the action of heat upon the contagium in the two forms of septicæmia known, respectively, as "Davaïne's" and "Pasteur's." Professor Rosenberger has recently published the results of his experiments in the same direction, by which he professes to have effectually sterilized by heat the blood and exudation fluids of the rabbit; and states that these fluids, so sterilized, upon injection into other animals, were found to be infective, reproducing the disease with the recurrence of the specific organisms which characterize it; he therefore regards these organisms as having no causal connection with the affections in which they are found, but as merely secondary or epiphenomenal. This would be the necessary deduction were it proved that the fluids had been effectually sterilized, and it was to test this point that Dr. Dowdeswell's experiments were made with the co-operation of Burdon Sanderson. The results arrived at are exactly opposed to those reached by Dr. Rosenberger; and, from the experiments, the author concludes that the active virus of infection, both in the case of Pasteur's septicæmia—the malignant œdema of Koche—in guinea-pigs, and in Davaïne's septicæmia in rabbits, is destroyed by the prolonged action of a sufficiently high temperature; that blood or exudation fluid so treated is not infective, nor in any appreciable man-

ner toxical, when injected in moderate quantities (up to 1 cub. centim.) into other healthy animals, while the same fluids unheated are invariably and fatally infective in infinitely smaller quantities.

In Davaine's septicæmia in the rabbit the author has found throughout his experiments that the period of incubation is remarkably constant, death, after the first generation of infection by putrid blood, almost invariably occurring in from twenty to twenty-four hours, and, consequently, that if it does not occur within about that period, it may be concluded that infection has failed; the animal may die subsequently, as rabbits in confinement constantly do, more especially under the conditions in which they are kept in laboratories; but, unless within about the period specified, they do not die infected with specific septicæmia, the characteristic organisms are not found in the blood, nor is that blood infective; hence it is not necessary to observe such animals for more than a few days after inoculation.

DISPLACEMENT OF THE HEART BY VIOLENCE.—The following case, by Mr. W. H. T. Winter ("Dublin Jour. of Med. Science," May, 1883), is a surgical curiosity, the author having been able to find but one similar—that by Dr. Stokes in the thirty-sixth volume of the "Edinburgh Medical and Surgical Journal."

The patient, a lad, aged nineteen, was injured by the fall of a wall. The sternal end of the left clavicle was dislocated upward, forward, and inward. The third, fourth, and fifth left ribs were separated from their cartilages, and on the front of the chest their extremities formed prominences. The heart was displaced downward and to the left, and there was a diffused impulse in the fifth and sixth intercostal spaces external to the nipple. The action of the heart was tumultuous, there was dyspnoea and the expression was anxious, the countenance was of leaden hue, the extremities cold, and the urine contained a trace of albumin.

Under general treatment the heart became after a time reconciled in a measure to its changed position, and the patient was comfortable unless he exerted himself. Six months after the accident the heart was still displaced, and exertion caused palpitation and dyspnoea.

In the similar case by Dr. Stokes the dislocation also remained permanent. In one case by Tibbits ("Lancet," 1876, vol. i, p. 598) the heart suddenly replaced itself.

THE OPERATION FOR HARE-LIP.—Mr. H. G. Rawdon ("Brit. Med. Jour.," Oct. 13, 1883) lays a good deal of stress upon the following considerations: The first is as to the advisability of operating early—that is, within a few days of birth. His own experience has been entirely in favor of so operating, and has amply confirmed the validity of the main reason adduced for so doing—viz., that new-born infants are, for the most part, healthy and well nourished, and far better able to bear an operation within twenty-four hours of birth than possibly they may be for weeks or months afterward. These children deteriorate rapidly after the third week from improper feeding and mismanagement, and, unless the mothers obtain proper instruction as to feeding before it is too late, death is inevitable. The health and vigor of the child are of more consideration to the surgeon in determining whether to operate or not than the actual age.

As affecting this question of early operation the cases may be divided into two classes: those in which, with proper management, operation gives the capacity to suck as soon as the sutures are removed, which may generally be done on the sixth or seventh day. This class includes cases complicated with incomplete cleft palate; that is to say, cases in which the fissure is limited to the alveolar portion of the bone. Secondly, those in which, owing to the co-existence of complete cleft palate, the power of suction can not be given. In the first class the duty

is to operate early, and in the latter also the surgeon is justified in operating immediately after birth. The alveolar cleft closes more symmetrically, quickly, and thoroughly, the difficulty of feeding is manifestly lessened, and the disposition to catarrh and bronchitis is also decreased.

As regards feeding, the author constantly finds ulceration produced on the end of the vomer from improper use of the spoon. The tendency of fluids to escape by the nostrils may be obviated by raising the child up. The mother's milk should be saved when possible, and the child should be fed with it from an old-fashioned, flat feeding bottle, provided with a large teat with a good-sized hole in it. The bottle should be slowly raised to pour out a little milk after each act of swallowing.

Regarding the operation itself, the author lays stress upon the great importance of freely separating the lip on each side from its bony attachments, the object being to allow the lip to move freely over the bones, so that the margins may be brought into apposition. He believes that the importance of this point has not been fully brought out or realized, and that its inadequate accomplishment has been a more frequent cause of non-union—in cases which otherwise promised well—than all other causes of failure put together. In complicated cases the thoroughness of the separation is the guarantee of success. In such cases the lip and ala nasi, and the contiguous cheek, require a free but careful separation from the bone for a considerable distance outward. A modification of this practice, which he has found of considerable advantage, consists in carrying the knife round the base of the ala nasi and continuing the incision in a curved direction upward, following the natural groove between the ala and the cheek. This upward incision does not need sutures, for, when the lip is brought together, the ala falls readily into position, and the resulting cicatrix is scarcely discernible. In following this practice the alæ should not be detached from their bony connection, lest they manifest a tendency to evert and show more of their inner aspect than is natural.

The next point is the appropriate treatment of the prominent alveolar process. Where the alveolar ridge on one side is much in advance of that on the other, the general practice is to divide the process partially some little distance from the cleft and forcibly press it into position. He strongly advises that, when the two portions of the lip can be brought over the projecting process and secured without undue tension, the prominent bone should not be divided or bent into position.

In the greater number of these cases, even when the gap in the palate is wide, and the projection of the alveolus not inconsiderable, a successful result may be assuredly expected without any such interference. The curing of the hare-lip alone is sufficient to depress the alveolus and diminish the gap to a remarkable extent, even in one week, while in a month or two the gap will be found closed, and the alveolus reduced to its proper level. Such is the powerful action upon the bony process of the comparatively slight pressure of the restored lip. Moreover, interference with the bone is not infrequently followed by a mild degree of septicæmia.

When, to accomplish the operation, it is absolutely necessary to reduce the level of the projecting alveolus, a pair of fine-bladed bone nippers, or a strong pair of surgical scissors, should be used in preference to the ordinary bone forceps, which crushes the structures too much. They should be applied in front of the lateral incisor, and in such a way as to divide the bone partially, and enable it to be pressed backward into the position desired. Lately, to effect this object, the author has employed a small and very fine osteotomy saw. It is only necessary to cut through the anterior plate of the alveolus partially, as high as the nostril, after which he has found that the bone could be easily bent back into position. By this method no tooth-sac

can be injured, which he believes to be a matter of no little importance in preventing septic complications.

The last point refers to the necessity of retaining or removing the intermaxillary bones in cases of double hare-lip, in which non-union of these bones with the superior maxillæ exists on both sides. He believes that in such cases they had better be removed, and at the time of the operation for the hare-lip. The central tubercle or *prælabium* should, however, always be preserved and utilized. It is very generally recommended to bend the intermaxillary bones back into the mouth, and, to facilitate this replacement, to cut partly through the vomer, or even to remove from it a triangular wedge. But this division of the vomer is apt to be attended with serious hæmorrhage. The great objection which the author urges against retaining the intermaxillary bones is that they act as a wedge, keeping the superior maxillæ wide apart, and, in point of fact, precluding the practicability of any operation for closing the cleft palate being subsequently attempted. It is an error to suppose that when these bones are removed a permanent gap in the front portion of the palate results; nor does their removal give to the profile an underhung look. The fact is that, even when these bones have been carefully replaced and retained, the profile will have that peculiar appearance, and the effect is mainly attributable to a want of relation between the lower and upper lip, the upper being too short from one angle of the mouth to the other to correspond with the lower; and hence the lower looks too large.

THE EXCISION OF GOÏTRE.—Dr. Julliard ("Rev. de chir.," No. 8, 1883), after an analysis of thirty-one cases of extirpation of goitre, arrives at the following results: He asks, Is it necessary to extirpate goitre? Should one operate on all cases indiscriminately? If not, What are the cases in which extirpation should be performed? The answer to these questions involves the consideration of the following points:

1. Is or is not the goitre a disease dangerous in itself and capable of causing death? To this he unhesitatingly answers in the affirmative. The growth may compress the trachea, may change its position and profoundly alter it, so as to cause respiratory troubles and pulmonary affections which eventually carry off the patient. The author has known of six fatal cases in the last five years. It is a mistake to consider goitre (he does not include benign goitres or malignant tumors of the thyroid) as a harmless affection, which has no other inconvenience than the deformity it may cause. On the contrary, goitre kills its man, and more often than is supposed—at least in Geneva.

2. Though goitre often causes death, it more often is an entirely benign affection. Every day we see patients reaching an advanced age in spite of a goitre, sometimes very voluminous, which has never troubled them except by the deformity it has produced. In a word, there are goitres and goitres.

3. We have in medication with iodine a precious means of curing goitre. On this point the author does not agree with those who hold that goitre is never cured, and that extirpation is the only radical treatment to oppose to it. He has seen too many cured completely, or at least reduced to a size that rendered them entirely inoffensive, to hold any such view.

4. Extirpation is not at present an operation to be looked at too seriously. It gives results as satisfactory as many other of the large operations at which nobody hesitates; but it exposes to secondary accidents which must be taken into account.

Every goitre, whether suffocating or not, should first be treated with iodine. If the medication succeeds, if the goitre is cured, or if the accidents which it causes disappear, all is well, and there should be no surgical interference. But, if the goitre, insensible to iodine, troubles the respiration of the patient, and especially if it causes attacks of suffocation even light

and at long intervals; if it is deep and only slightly movable, no matter what may otherwise be its volume—it is necessary to remove it, because these goitres always end, at one time or another, badly for the patient. The extirpation should be partial if possible. Otherwise it should be complete; for it is better to live by running the chance of the accidents which may follow total extirpation than to die choked by a goitre. Action should not be delayed. The more one waits, the more complicated and dangerous will the operation become. It is in consequence of temporizing that goitres are allowed to develop and produce such changes that extirpation has scarcely a chance of success. The greater number of unsuccessful extirpations are due to the fact that the operation is done too late. Among the author's five patients lost he counts four which might as well have been saved as the others had the operation been done earlier.

On the question as to whether an operation should be done in cases where the goitre causes no accidents, where the operation is simply a matter of æsthetics, two opinions are found. According to some, an operation should always be done without hesitation; according to others, they should never be touched under any pretext. The author holds to neither extreme, and decides each case for itself. If the goitre is small, causes little trouble and deformity, there should be no hesitation in refusing to operate. If it be large, and at the same time patulous on the surface, and limits itself to enlarging the neck, one should abstain also, for here the deformity may easily be concealed by the toilet, and because, again, extirpation in these cases is always a serious matter. Large goitres, not prominent, are always deep, and in these cases the inconvenience of the tumor is not in proportion to the danger of the operation. But, if the goitre is at the same time large and prominent, one need not fear to interfere; for here the deformity can not be concealed, because the extirpation of a salient goitre is much less dangerous and more simple than that of a deep one, and because one may limit himself to removing the salient part of the tumor without entirely removing the gland. The dangers of such an operation as this are not such as to justify one in systematically refusing a patient to relieve him of a deformity which is often a veritable calamity.

In the author's statistics it will be seen that of his thirty-one operations six have been of cysts of the thyroid. Up to the present time extirpation has been confined almost entirely to parenchymatous tumors. Cysts of the thyroid have been treated by other methods, the chief of which are drainage, seton, cauterization, injections of iodine, non-antiseptic incisions in which the sac suppurates and is obliterated by granulations, and antiseptic incisions in which obliteration of the sac is obtained without suppuration by approximation of the walls. Let us examine a little the value of these operations as compared with extirpation. The author rejects all proceedings which are based on the suppuration of the sac, such as drainage, the seton, cauterization, and non-antiseptic incision. They are all apt to be followed by suppuration which may last for months, and they expose the patient to the risks of gangrene, purulent infiltration of the cellular tissue of the neck, and hence to purulent infection, without speaking of fistulæ and returns. All these methods should be abandoned by surgery, for there are better ones at her disposal. Injections of iodine and antiseptic incision are alone worthy to be preserved, and to both of these the author prefers extirpation.

The injection of iodine is the method generally adopted, and it meets with numerous successes; nevertheless, there are serious objections to it. In the first place, it is often ineffectual. A return of the disease is a common occurrence, and, if the cavity is not spherical, if the cyst presents anfractuosités, if the walls are thickened, or if the fluid is not serous, they are the rule. In the

second place, injections of iodine are inapplicable to those cysts which are hæmorrhagic, and to those which are divided into compartments. But these are minor faults. The great objection in the author's mind is that the treatment is liable to be followed by serious accidents, the most important of which are:

1. The inflammatory swelling which always follows the operation. This is said generally to be moderate. Nevertheless, it does occasionally happen, and this without its being possible to foresee it, that the swelling passes the proper limits. If the excessive swelling in a case of hydrocele is not a serious matter, in a case of thyroid cyst it is very different. Here, if the tumor be a little large, and if it already interfere a little with respiration, the surgeon is in danger of seeing his patient die in an attack of suffocation. The author has had this experience once, in a cyst of moderate size which interfered a little with the respiration, and has never been induced to repeat the performance.

2. Suppuration is a frequent result of injection, and one equally impossible to foresee. Suppuration is a very serious matter, because the pus in the cysts has a great tendency to become putrid. The number of patients who have died of purulent infection following the suppuration of a cyst is much larger than is generally supposed, and to the reported cases many unreported ones may be added.

The operation by antiseptic incision consists in incising the whole length of the cyst, perhaps excising a part of the sac, and closing the walls and the skin with sutures after placing a drainage-tube in the most dependent portion. The walls thus approximated become adherent, and the wound closes by primary intention. This procedure the author prefers to any irritating injection, because there is no danger either of swelling or infection; but to it also there are serious objections. Thus, like iodine injections, it is inapplicable to cysts called hæmorrhagic and to those which are multilocular. Moreover, it is not free from relapses and fistulæ. The operation is based upon immediate union of the walls of the sac. In order for this to happen, the walls must be exactly approximated through their entire extent. But if there are anfractuosités in the cavity of the cyst, if there are diverticula in its deeper parts, if, again, the walls of the cyst are thickened and rigid, the exact approximation of the walls becomes exceedingly problematical; and if there remains a single point, no matter how small, at which the walls are not approximated, it will suffice to cause a relapse or a fistula.

If the cavity of the cyst is regular, if there are neither anfractuosités nor diverticula, if the walls are thin and supple, the author recognizes that an exact approximation may be obtained without much difficulty. But even in cases such as these the conditions for adherence of the walls leave much to be desired. It must not be supposed that, even in such cases, things will go on as easily as in an incision into a hydrocele, for example. When the operation of incision into a hydrocele is performed, we have to do with a serous membrane, and we know that when serous surfaces are approximated the special tendency is to adhere. But it is not by any means the same with the surface of a thyroid cyst. Not only is the internal wall of the cyst not covered by a serous membrane, but it is covered by epithelium. Now, in approximating two epithelial surfaces, the function of which is to secrete a colloid material, we are very far from realizing the same conditions for immediate union which exists when two serous surfaces are brought together; indeed, the conditions are much less favorable than when two bleeding surfaces are brought together, as in extirpation. And, if we have already met with relapses following incisions into hydroceles, how much more may they be expected, as also incurable fistulæ, as a result of incision into thyroid cysts!

For these reasons the author prefers extirpation to injections

or to incision. To iodine injections, because it does not expose to swelling, to suppuration, or to infection. To incision, because it does not expose to relapse or to fistulæ. To better understand his thought, the author divides these cysts into three categories. The first comprises those called hæmorrhagic and the multilocular. There is no discussion, he thinks, as to the rule that these should be treated by extirpation. In the second category he ranges the unilocular cysts—those in which the cavity is irregular and has prolongations more or less deep, those in which the walls are more or less thickened and rigid, those in which the walls are rigid, which interfere, if only slightly, with the respiration, and of which the contents are not serous. For such as these the swelling following injection may have serious consequences, as may also the suppuration—consequences equally impossible to predict or prevent. As for relapse, it almost always happens, and is the least of the inconveniences which may be expected. As for the antiseptic incision applied to this form of disease, the author predicts more relapses and fistulæ than successes. The third category comprises the unilocular cysts, in which the cavity is irregularly spherical, without either prolongations or anfractuosités, in which the walls are thin and supple, the liquid of which is serous, and which are small, prominent, and superficial. These are the triumph of antiseptic incision and of iodine injection, but they are equally the triumph of those in which extirpation is simple and easy. To inject one of these cysts is to expose it to relapse, to inflammatory accidents, and to suppuration; and this is not the case if it be extirpated.

Extirpation is as easy and sure as incision. The author can understand how one may prefer injection to extirpation, because the former is not usually considered as a surgical operation. It causes no loss of blood, and when it succeeds it leaves no scar. But when the bistoury is once in hand he can not see why one should prefer incision to extirpation. Extirpation is a little longer than incision, and that is all: but it is not more painful, it is not more dangerous, for there is no occasion for interference with the carotid or jugulars, with the recurrents or pneumogastries, and there is no retrosternal pouch. It heals as quickly and as well as an incision, if not better, as the reader may convince himself by reading the author's cases; the cicatrix left is the same as in incision; and with it one is at least certain not to have either relapse or fistula, which is more than can be said for incision.

(To be concluded.)

Miscellany.

Therapeutical Notes.—*The Treatment of Sebaceous Cysts by Injections of Ether.*—In the "Bulletin général de thérapeutique" for November 30, 1883, M. Lermoyez, interne at the Hôpital Saint-Louis, Paris, describes M. Vidal's method of treating sebaceous cysts by means of injections of ether. Using a Pravaz's syringe, and inserting the point into the largest of the apertures that come into view when the tumor is made tense by pressure, from five to ten drops of ether are injected into the sac, the quantity to be varied according to the size of the tumor. This causes no pain beyond the slight discomfort due to the distension of the sac, and it is to be repeated every second day until signs of inflammation make their appearance. Then a puncture is to be made at the base of the tumor, and a small amount of pus will escape. This is followed by the sebaceous matter, broken down into a vermicelli-like mass, together with shreds of membrane, the remains of the cyst-wall. The tumor is then found to have disappeared, leaving in its place nothing but a slight and transient thickening of the subcutaneous connective tissue covered by perfectly sound

skin. The process of cure usually takes no longer than from ten to twenty days, and never causes any fever, or even headache. M. Vidal has employed the method in the cases of several patients who occupied beds in a ward where there were erysipelas patients, but in no instance did infection take place. It is considered desirable to move the point of the syringe about somewhat after it has entered the tumor, and before the ether is injected, in order to break up the sebaceous mass and irritate the lining membrane of the cyst. The ether should be injected gradually, and injection should be stopped so soon as the patient feels a sense of distension. There is no occasion for the patient to give up his usual course of life during the cure.

CHOREIC COUGH.—Dr. J. Mortimer Granville writes as follows to the "Medical Times and Gazette":

"Attention has recently been directed to what is called 'laryngeal chorea.' The laryngeal muscles are commonly implicated in the disorderly movements of chorea which has attained any degree of development; and there is a well-known form of cough which is analogous in its nature and causation with the cough of this new, or rather newly described, disease—'laryngeal chorea.'

"It is, however, with regard to another form of the same nerve-trouble that I ask your permission to offer a few remarks and suggestions. Young persons of either sex, but particularly the female, are very commonly affected between the ages of fifteen and twenty with a cough which is laryngeal, and characterized by a peculiarly metallic ring, either 'cracked' or 'whistling,' during the indraught, and often producing in the intervals of the paroxysm 'hoarseness,' 'squeaking,' or 'loss' of voice. The fault is irritation of the recurrent laryngeal nerve, and it very often happens that the pneumogastric is also irritated to such an extent as to give rise sometimes to gastric disturbance, at others to faintness from slowing of the heart-beat, or 'palpitation' from temporary suspension of the inhibitory control of the vagus. If the trouble ended with this it would be of minor importance; but the gastric or cardiac irritation set up, and the cough, together, besides giving rise to mistake as to the general condition of health, actually, as I believe, favor the occurrence of nutritive changes in the bronchial membrane and submucous tissue, which induce a low inflammatory action, and issue in the exudation and deposit of tuberculous lymph. Hence we get the class of cases which are thought to have 'nothing wrong with the lung' except bronchial irritation, but which too often end in rapid tubercularization, phthisis, and death. They are, in truth, cases of 'bronchial irritation'; but the irritated structure is the nerve, and, consequently, there is no natural limit to the disorder which may ensue. Practitioners who have much to do with the younger members of families will recognize the affection of which I speak.

"Now, I believe there is only one method of treatment which is quickly and completely successful in putting an end to the morbid state of irritability whence arise all the phenomena that go to make up the misleading and mischievous affection of 'pulmonary weakness' or 'throat cough' as it occurs in the adolescent. It is not a pleasant remedy, nor, on the other hand, is it a very formidable one. It is briefly this: to paint over the course of the pneumogastric nerve, or (which is sufficiently near for the purpose) along the anterior margin of the sterno-cleido-mastoid muscle, a space extending from the level of the lowest margin of the lobe of the ear to the sterno-clavicular articulation, and about one sixth of an inch in breadth, with liquor vesicatorius or glacial acetic acid. This should be done first on one side, and, when the blister has healed, on the other side, commencing with the side on which there may possibly be found some indications of what is fashionably called 'lung weakness.' If the first application does not put an end to the cough, another should be made about a fortnight afterward—the sides being blistered alternately, and the treatment continued until the symptoms entirely disappear, which will generally be within two, or at most three, months. No medicine need be given, except, perhaps, small doses of cod-liver oil, if there be any loss of flesh. In this case the dose ought not to exceed one teaspoonful twice or thrice daily, being taken about two hours after a meal. I would strongly urge those who have to treat cases of the class to which I refer—namely, of choreic or 'nervous' cough—to try the method described, which I believe to be in a signal degree effective."

OPERATIVE PROCEDURES IN CASES OF INTESTINAL OBSTRUCTION.—Mr. J. H. Morgan, in a paper read before the British Medical Association ("Brit. Med. Jour.," October 6, 1883), makes the following suggestions:

Given a case of intestinal obstruction in which, by auscultation and other methods, the integrity of the colon may be presumed, the median line seems to offer the most favorable situation for the incision, since from it every region of the abdomen can be explored, the risk of hemorrhage is diminished, it is not ill-suited for the formation of an artificial anus, and it can be extended, if necessary, in a vertical or lateral direction.

Exceptions to this rule may occur:

1. In the case of herniæ reduced *en masse*.
2. In the case of foreign bodies, gall-stones, etc., which can be felt from without to be impacted in the intestines.
3. In the case of tumors external to and pressing upon the gut.

Under any of these circumstances it may be advisable that the incision should be made directly over the region in which strangulation may be presumed to exist; but the middle line may still be preferable in the third case when the tumor is ovarian, or where, notwithstanding the pressure of a tumor, the compression is caused by a band which passes from it to some other portion of the abdomen.

It has, moreover, been shown that, if the obstruction be found after all to be situated in the colon, a median incision does not forbid the subsequent operation of colotomy, or the removal of a cancerous growth.

As to the mode of finding the seat of the obstruction after the abdomen has been opened, a valuable hint has lately been given by Dr. Kingston Fowler, who points out that the collapsed portion of the bowel, which it is so important to secure, will, in these cases, be found in the pelvis, and may be most easily reached toward the right side.

Bands are most frequently situated in the right lateral region of the abdomen, and, when found, may be divided at the center or at each extremity; but it should be noted that many cases are recorded in which, one band having been released, the symptoms have persisted, and post-mortem examination has shown the existence of a second band causing constriction. Its absence should therefore, if possible, be determined before closing the abdomen.

Or it may be advisable to remove the cause of constriction altogether, as where intestine is already in a state of gangrene. In this case the desirability of re-establishing the continuity of the tube by union of the sound portions of intestine is greater in proportion to the distance of the constriction from the stomach. In one of Kocher's cases, forty-two centimetres of gangrenous gut were removed, and recovery followed. Billroth's cases of pylorus incision show how large a part even of the upper portion of the tract may be removed without destroying the digestive function.

The argument against excision, that it is frequently followed by stricture, requires further demonstration before it should be permitted to tell against the operation.

All present observations indicate the desirability of earlier diagnosis and of earlier surgical interference in proper cases.

HYSTERIC FEVER.—Dr. Briand ("Gaz. hebdomadaire de médecine et de chirurgie," Oct. 5, 1883) maintains, in opposition to H. Pinard ("De la pseudo-fièvre hystérique," Thèse de Paris, 1883), that this complaint is not a mere counterfeit, since, in several cases carefully observed by himself and others, the bodily temperature has exceeded 100 Fahr. He still adheres to the conclusions put forth five years ago in his own graduation thesis on the same subject. These are as follows:

1. Febrile symptoms undoubtedly arising from hysteria are of frequent occurrence.
2. The slow hysterical fever first noticed by Briquet is not the only form which the fully developed affection may assume.
3. There is another, generally primary, and of brief duration, which resembles typhoid. It is in this form that the bodily temperature is highest.
4. An intermittent variety of hysterical fever is also met with—especially under the last of the above-mentioned types—and in this the temperature is comparatively low.

RETENTION OF THE PLACENTA AS A SAFEGUARD AGAINST SECONDARY HÆMORRHAGE FROM ATONY OF THE UTERUS.—Dr. E. Thomann ("Central-

blatt für die gesammte Therapie," Sept., 1883) describes the case of a primipara, aged twenty-six, of leucophlegmatic and serofulous constitution, whose labor lasted four days, in consequence of uterine inactivity, with dryness and rigidity of the soft parts. There was no fever, nor were there other unfavorable symptoms, excepting those resulting from fatigue. The child was born in a state of asphyxia, but was resuscitated without much difficulty. After the usual interval, Dr. Thomann was about to take away the afterbirth, when the uterus, which had contracted quite firmly, suddenly relaxed, and lay like an empty bag within his grasp. Not a drop of blood escaped. The placenta lay partly in the vagina, but most of it was firmly fixed within the cervical canal, which it completely occluded. In order to obviate the risk of secondary hæmorrhage, it was thought best to leave it in this situation, where it might act as a natural tampon; and here, accordingly, it remained for sixteen days, when its removal was effected with considerable difficulty, but without the slightest loss of blood. The patient's condition was excellent, and she passed through her confinement without an untoward symptom.

This case, the author thinks, may serve to warn us against undue haste in forcibly effecting the extraction of the afterbirth—especially when the uterus has been exhausted by a difficult and tedious labor. Under the circumstances related, even if hæmorrhage should take place behind the retained placenta, the latter, together with the blood accumulated in the uterus, will hold it in check until this organ has had time to recover its contractility, discharge its contents, and remedy the mischief by its own inherent powers. There need be no fear that such delay will give rise to septicæmia, unless signs of endometritis have already been noticed, or unless hæmorrhage have occurred during the progress of the labor, indicating a partial loosening of the placenta, as a result of diseased conditions. In either of these cases, of course, the uterus must be freed from its burden as speedily as possible.

THE MUTABILITY OF BACTERIA.—The question whether the same germs under different conditions give rise to various diseases has been raised, but not settled. Dr. Carpenter, at the meeting of the British Association, treated the subject from a point of view of natural history. He referred to the facility which the lower forms of life possess of adapting themselves to changed conditions of existence. He believes that the same germs may under altered circumstances produce various diseases, and these opinions he supported by various arguments. The decrease of the virulence of the small-pox which ravaged Europe in the fifteenth century he attributed to the cultivation of the mildest cases which occurred. A severe attack of any particular disease may so affect the system that a disease arises which can not be recognized as related to that from which it proceeded. Under favorable conditions an ordinary intermittent fever may develop into a virulent form, which is highly contagious. There is, in his opinion, very strong ground for the belief that even the innocent hay bacillus may undergo such an alteration in its type as to become the germ of severe disease.—*Lancet*.

MEDITERRANEAN FEVER.—In the report on the health of the troops serving in the Mediterranean in 1881, the officer in charge of the station-hospital at Gibraltar, Brigade-Surgeon Fuller, thus describes his experience of Mediterranean fever: "It is characterized in mild cases by ordinary febrile symptoms, with lassitude, debility, and slow convalescence. In severe cases there is great prostration, with profuse perspiration. In some the lungs posteriorly become rapidly consolidated by engorgement; in some there is brain-congestion and low muttering delirium; in others there is bowel-complication closely resembling enteric fever. Death may occur from any of these complications. The fever sometimes runs a very protracted course, unattended by any complication, culminating in an altered or morbid state of the blood, and a condition of profound prostration complicated with purpura. After defervescence, in a very large number of cases, a rheumatic affection of the fibrous tissues around the joints and other parts supervenes. The duration of this stage of the disease may extend over an indefinite period; in some it may be counted in months. The cause and nature of this fever are still unknown, but it is proved beyond doubt that it is neither enteric, malarial, nor relapsing. My own idea is that the cause is to be found in climatic peculiarities. When there

has been bowel-complication, there is leaden-colored congestion of the duodenum and upper part of the jejunum. The ileum is generally healthy; Peyer's patches unaltered. In one case the patches were observed to be very slightly swollen, but not sufficiently to be pronounced diseased; large intestines healthy."—*Med. Times and Gazette*.

A NEW THEORY OF SHOCK.—In traumatic shock, stupor, collapse, apoplexy, syncope, etc., there is, according to Brown-Séquard, a nervous inhibition of the normal gaseous interchange of the tissues, so that venous blood becomes like arterial—deep red, rich in oxygen, and poor in carbonic acid. Any kind of injury to the nervous system, stimulation of the skin and mucous membranes, poisons (especially if sudden in their action), etc., produce this nervous inhibition. Asphyxia differs from this not only in the condition of the blood, but in the absence of convulsion, the blood-filling of the left heart, and the greater duration of the irritability of the nervous and muscular systems.—*Med. Times and Gazette*.

ANTISEPTICS AND HOUSE-SURGEONS.—While an increased faith in the efficacy of strict antiseptic precautions must of necessity follow the brilliant results obtained by Professor Lister in his treatment of fractured patella, the remarks made by him at the last meeting of the Clinical Society on the subject of attention to the details of dressing should be seriously taken to heart when dangerous operations are undertaken. The suggestions thrown out—by one surgeon, that the septic condition of a wound hitherto aseptic *might* have been due to the absence of the regular house-surgeon upon his holiday; and by another, that similar want of success *might* have been the result of a little assistance rendered during the operation by a colleague with unwashed hands—are instructive. Much of the opprobrium of failure of antiseptic precautions in hospital cases must of necessity fall upon the house-surgeon or dresser, if, as in some large hospitals, the latter is placed in responsible charge of his cases. If a house-surgeon is to be thoroughly versed in all the details of antiseptic dressing, so as to be equal to the emergency-practice of a large hospital, he must have been brought up, as it were, in an antiseptic or Listerian atmosphere, and his mind must be imbued with a persistent enmity toward all sorts and conditions of germs, and accustomed to regard the homely poultice as a barbaric contrivance of a bygone age. But house-surgeons and dressers must in their turn enter upon the general practice of surgery and be prepared to treat cases and to operate under circumstances where antiseptics can not be applied. Here their knowledge of the manners and customs of disease-germs and their contempt for the efficacy of the poultice will avail them but little, and patients may suffer in order that their medical attendants may theorize. Until the day, predicted by Professor Lister, arrives when rigid antiseptic rules shall be universally applied, the custom of restricting the student to the practice of one surgeon only will be followed, as it frequently is at present, by the unsatisfactory consequence that the *general* experience of surgical practice has to be learned at last instead of at first. But Mr. Lister insists that the success of antiseptic treatment depends largely upon the antiseptic training of those who have to carry it out. Perhaps the best way out of the difficulty is that suggested by himself, viz.: that surgeons should attend daily and see to their dressings themselves.—*Med. Times and Gazette*.

NAVAL INTELLIGENCE.—*Official List of Changes in the Medical Corps of the Navy during the week ending December 15, 1883.*—SURGEON F. M. DEARBORNE placed on the retired list from December 10th. PASSED ASSISTANT SURGEON A. C. HEFFINGER, in addition to his duties at the Navy-Yard, ordered to attend officers at Portsmouth, N. H.

SOCIETY MEETINGS FOR THE COMING WEEK.—*Tuesday, December 25th:* New York Dermatological Society (private); New York Surgical Society (private); Medical Society of the County of Lewis, N. Y.; Jersey City Pathological Society. *Wednesday, December 26th:* New York Pathological Society; American Microscopical Society of the City of New York; Auburn City (N. Y.) Medical Association. *Thursday, December 27th:* New York Academy of Medicine (Section in Obstetrics); Harlem Medical Association (private); Brooklyn Pathological Society. *Friday, December 28th:* New York Clinical Society (private); New York Society of German Physicians (private); Yorkville Medical Association (private).

Lectures and Addresses.

A CLINICAL LECTURE

ON SOME

NERVOUS AFFECTIONS IN CHILDREN,

DELIVERED AT THE HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA,

BY HORATIO C. WOOD, M. D.,

PROFESSOR OF MATERIA MEDICA AND PHARMACY, AND CLINICAL PROFESSOR OF NERVOUS DISEASES.

Infantile Paralysis.—Diphtheritic Paralysis.—Chronic Inflammation of the Cortex of the Brain, following Meningitis.

CASE I.—GENTLEMEN: The first patient I shall show you was at the hospital six years ago. The history which I find in the books is as follows: "August 19, 1876, A. B., aged nineteen months, living in Pittsburgh. About last Christmas the child fell out of bed, a distance of twelve or eighteen inches. It had always been healthy, and for a week or two after the fall nothing wrong was observed. The child then began to have high fever, vomiting, and convulsive jerking during sleep; these symptoms continued for several days. After they had passed away it was noticed that the left arm was paralyzed. At first it could not be used at all, but later some improvement occurred. There is much atrophy of the arm, but no decided lowering of temperature. The treatment consisted in the administration of phosphorated-oil mixture and the use of electricity. The child improved considerably and returned to Pittsburgh."

We have, then, a history of a fall which may, or may not, have had something to do with the attack which followed. About a week afterward the child was seized with high fever, jerking of the muscle, and some delirium which lasted for one or two weeks. It was then discovered that one arm was paralyzed. He was brought to the dispensary, and the left arm was found to be distinctly atrophied, with great loss of power.

This was, then, a case of monoplegia. As you know, monoplegia is paralysis of one extremity, while hemiplegia is paralysis of a lateral half of the body, practically palsy of the leg and arm, and paraplegia is paralysis of the lower extremities.

In monoplegia the lesion is always located in one of three places—either in the cortex of the brain, or in the large cells in the anterior cornua of the spinal cord, or in the nerve-trunks.

Let us decide to what the monoplegia in this case was due. It may have been cerebral. The fibers of the spinal cord as they enter the brain spread out like a fan, so that, if you have a lesion where the fibers begin to diverge, there will probably be paralysis of several groups of muscles—a hemiplegia. But, if the lesion involves the cortex of the brain, only those muscles supplied by the individual bundle of fibers upon whose origin the clot impinges will be affected; monoplegia will result. Was the monoplegia in the child before you due to cortical lesion? The history of a fall on the head, the fever and the delirium, would seem to

indicate that this might have been a case of meningitis, and that there was a clot or some other lesion affecting the cortex of the brain. If, however, the paralysis had been due to a clot following the injury, the palsy would have developed immediately more than this; the record says that the muscles of the arm were atrophied. The nutrition of every muscular fiber, and probably of every gland-cell, is under the influence of certain nerve-centers, and, when such a nerve-center is diseased, the part overseen, so to speak, by that nerve fails. The cortical nerve-cells are not the trophic nerve-centers of the muscles; and, therefore, whenever monoplegia is followed by rapid wasting, you know that the monoplegia is not of cerebral origin. Let me repeat this.

There is nothing in the history of the present case to denote a peripheral lesion. If the child had broken its arm, or torn the nerve, or pressed upon it, or if the paralysis had been preceded by intense pain, eruption of herpes and other indications of nerve lesion, we might think that this monoplegia was due to a peripheral lesion; for, as you can easily understand, when there is any lesion of the nerve separating the muscles from the trophic centers, there is wasting of the muscles, although the trophic centers themselves remain normal. From the absence of any history of nerve lesion, from the absence of pain in the arm, and the presence of very marked constitutional disturbance, we come to the conclusion that this child did not have a peripheral lesion.

If the monoplegia is not due to a cerebral or to peripheral lesion, it must be due to some disturbance of the large cells in the anterior cornua of the cord. You will remember that infantile or essential paralysis of childhood often begins with high fever, headache, and delirium, and may readily be mistaken for typhoid or malarial fever. In this child the attack came on like an attack of essential paralysis, and the results are those of that disease; consequently, we come to the conclusion that the child is suffering from the results of essential paralysis. As the record says, the child was treated with phosphorus and the application of electricity to the arm, but, after being under treatment for a short time, it was taken to Pittsburgh.

We now have an opportunity of examining it, after the lapse of five years. You see that the left arm is very much atrophied, but there is no complete paralysis of any one muscle, for the child is able to execute all the ordinary movements of the arm. The arm is not cold.

Essential paralysis in its acute form is rarely met with in adults, but very commonly in children, while, on the other hand, the chronic form, although rare in adults, is still more rare in children. The reason for this is, I think, found in the fact that in the child these cells are in a state of extreme activity. They are engaged not only in maintaining the strength of the muscle, but they are also building up that muscle; but in the adult, after full development has been reached and growth ceases, these cells pass into a comparatively inert condition. You know that it requires a stronger force to build a house than to keep it up after it is built. Whenever a tissue is in a state of high functional activity it is on the verge of over-action, and any attack

which it suffers almost of necessity takes an acute form. If a child has a congestion of the spinal cord, these cells are very liable to become acutely affected, and the simple congestion passes into polio-myelitis, while, if an adult has congestion of the cord, these cells do not respond, and when the congestion subsides all may be well.

In regard to the prognosis in this case, the child was first attacked six years ago. During the past five years there has been considerable improvement. We know that there is at present no disease going on in that child's spinal cord. We have only the results of the acute attack to deal with. We first want to measure, if we can, the amount of damage that has been done. When a muscle is separated from its trophic center there is a deterioration of that muscle, which can be measured by the electric current. The muscles first lose the power of responding to the faradaic current, and later the power of responding to the galvanic current.

The muscles in this case respond to the galvanic current. If in a case like this the muscles fail to respond to any form of current, you can not expect to do much good by treatment. In this case the child may be much improved by persistent treatment, but it is not at all probable that the muscles can be restored to their full power. Very little can be done to restore the cells of the spinal cord, but we can bring up the nutrition of the muscles, and, as the existence of voluntary power and the electrical condition of the muscle here show that the spinal cells have so far recovered themselves as to be able to prevent a continued degeneration of the muscles, there is every reason to suppose that, if we can improve the nutrition of the muscles, the cells will be able to maintain the improvement.

In applying electricity to these muscles, the guiding rule is to employ that current which gives the greatest contraction with the least pain. The applications should be made every other day, and the treatment kept up for several months. Massage, careful gymnastics, and the hypodermic injection of strychnia will be found useful adjuvants, and, when you can command the use of the Gounod's boot with mechanical, very rapid vibrations of the limb, are, I am convinced, of service.

CASES II. and III.—Here are two patients who, although suffering from entirely different affections, have some curious symptoms in common. They both have an affection of the speech.

This boy (about nine years of age) was well until six weeks ago, when he had some sort of attack lasting three weeks. At the end of this time the speech became affected, and within a few days he had almost lost the power of talking. He seems as bright as ever, but wants to keep quiet all the time. He knows everything that is said to him. He staggers when walking. When hungry, he asks for food.

In the other patient, a girl of six years, the loss of the power of talking came on gradually, beginning about six months ago. Previous to this the child was very smart, but since then its mind has failed. She has become restless, worries, and cries a great deal. If left alone she does not ask for anything to eat, and does not play with her toys.

There you have a clear case of brain deterioration along with the loss of speech.

I ask the boy his name, and you observe the peculiar character of the voice. Whenever you hear that nasal voice acutely developed after a severe illness, you can be almost positive that the child is suffering from diphtheritic paralysis. The mother tells me that when the child was sick he had sore throat, high fever, his nose bled a great deal, and he was very sick. The voice which you heard is indicative of paralysis of the palate, and this paralysis is excessively rare from any other affection than diphtheria. I do not remember ever seeing acute paralysis of the palate unconnected with marked cerebral symptoms from any other cause. The boy can swallow solids quite well, but not fluids. The girl seems to have some difficulty in getting the food to the back of the mouth, but when she gets it there it is readily swallowed.

There may be a partial paralysis of the lips and tongue, causing a difficulty in taking food, but when the food reaches the gullet it is readily swallowed. This is not a real but a seeming difficulty in swallowing. A real difficulty in swallowing may be due to a muscular affection, spasmodic, paralytic, or rheumatic, or it may be due to an obstruction from post-pharyngeal abscess, etc. In order to diagnose between paralytic and organic difficulty of swallowing, we inquire whether solids or liquids can be taken best. If there is an organic difficulty, as, for instance, when a child has a post-pharyngeal abscess, or an adult has a stricture high up in the œsophagus, the patient can swallow liquids better than solids, while with a paralytic difficulty he can swallow solids better than liquids.

In the girl we know that there is no affection of the palate muscles, that there is slight palsy of the lips and tongue, and that the trouble is due to some disease of the brain, for there is loss of mental power, complete change in the disposition of the child, which has been going on for months, associated with either a paralysis of the parts concerned in speech or else with aphasia. I said that this was associated with paralysis. I may be wrong. It may be due to a loss of the power of thinking words. But, on inquiry, the mother tells me that the child slobbers a great deal, and you can see that there evidently is lack of power of the labial muscles to keep in the saliva. There must be somewhere in that child's brain a progressive lesion, probably at the base of the brain. The probability is that this child has had an attack of meningitis, and this meningitis has led to inflammation of the cortex of the brain.

In the other case the diagnosis rests upon the history of the palsy having followed sore throat, and upon the character of the paralysis. The true nature of diphtheritic palsy is not thoroughly made out, but it is almost certain that it is the result of a peripheral lesion—that is, an involvement of the motor nerves. It especially affects the parts about the throat, because it is here that the original lesion is most marked. Although the paralysis nearly always affects the throat primarily, yet, in many cases, it involves other parts of the body. This child is weak all over. His mother says that his sight is affected. This is probably due to loss of

the power of accommodation from palsy of the intraocular muscles.

Diphtheritic paralysis usually terminates in recovery, and, unless the ease is exceedingly severe, you can give a favorable prognosis. I have known of one or two cases in which death resulted, but this is rare. In regard to the treatment, rest is of the first importance. Many cases of diphtheria have terminated fatally in which that result could have been avoided if the physician or parents had realized the importance of rest during convalescence. There can be no doubt that the cardiac nerves, or the cardiac muscle itself, shares in this paralytic condition. In all severe cases directly after the attack, especially if there is marked palsy, the child should be kept perfectly quiet. Later in the attack you permit some exercise, always avoiding over-exertion. Passive exercise, massage, rubbing, and especially the application of electricity, are of value. Strychnia is also of service. It should be given to the point of producing distinct evidences of its action.

The treatment immediately after the attack should, then, consist in absolute rest, the careful administration of strychnia, and the application of electricity to the affected muscles.

Original Communications.

CRITICISMS ON THE SPECIFIC THEORY OF HYDROPHOBIA.*

By CHARLES W. DULLES, M D.,

SURGICAL REGISTRAR TO THE HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

NEARLY two years ago I had the painful experience of being summoned one day to take charge of a boy who was suffering with what is called hydrophobia. The unfortunate patient was under my care and observation less than twelve hours, when he died. The horrors of that day can only be understood by those who have had a similar experience. To stand in the presence of such distressing psychical disturbances, to see death advancing relentlessly, to feel that science furnishes no satisfactory explanation of the nature of the disorder and offers no trustworthy remedy for its treatment—this was a trial of mind which intensified the weariness of body which the circumstances necessarily entailed. The details of the case were read before the West Philadelphia Medical Society, and are recorded in the "Medical News," May 27, 1882. There can be found all the points which at the time most impressed me. There, too, are recorded the theoretical and practical notions in regard to hydrophobia which I had at that time. Later, on May 23, 1883, I read before the Philadelphia County Medical Society a paper entitled "Remarks on Hydrophobia," which was published in the "Philadelphia Medical Times," August 11, 1883. In this are set down some of the conclusions which I had reached after more than a year's study of the

literature of the subject. The point aimed at in that communication was to attract the attention of those who heard me to the extremely unsatisfactory condition of our knowledge in regard to this disorder, and to lodge in their minds the suspicion that the views so ordinarily held, and so positively stated, in most of the text-books, are not as clearly established as most people believe. In concluding the discussion which followed in the society, I stated all I wished to at that time, of my own convictions, in the expression that "but little of the evidence upon which it (the commonly-accepted theory of hydrophobia) rests can be regarded *an accuracy and reliability commensurate with the delicateness and gravity of the questions at issue.*" Since then I have continued my investigations, and, the wider their extent has grown, the firmer has become my belief that this statement was the very mildest that could have been used without sacrificing the truth. But I have learned, by reading and by experience, that those who differ from the majority are in danger of being treated to a certain amount of disdain for their inability to accept as evidence what to others seems acceptable enough. For example, Dr. Parry, in his interesting work on "Cases of Tetanus and Rabies Contagiosa," published in London, 1814, indicates his sentiments as follows: "It was formerly doubted whether any such disease as canine hydrophobia existed; and I have heard that the question was once solemnly debated in a society which, after a long discussion, determined it in the negative by a majority of voices. The existence of the giraffe, or camelopardalis, was long denied by the moderns, not only notwithstanding the accounts given of it by the ancients, and its delineation on the Prænestine pavement, but after its skin was actually to be seen dried and stuffed in a Dutch museum. We are told of a king of Siam, who, after he had heard with patient attention certain wonders from a European ambassador, and was at last informed by him that in his country, at certain seasons of the year, water became solid and was capable not only of being cut or broken, but of admitting his Majesty and his whole court to walk over it without wetting their feet, flew into a violent passion, exclaiming: 'For a long while, notwithstanding the prodigies you have related to me, I thought you were an honest man, but now I am sure that you are an impudent liar.'" In this story the intimation that our knowledge about hydrophobia has reached the "dried-and-stuffed" stage goes well with the other intimation: that the skeptics in regard to it are in the state of ignorance comparable to that of the king of Siam.

Later than Dr. Parry, but still in this century, Dr. Copland set the stamp of his learning on the doubters thus: "The supposition lately published that there is no such specific disease as rabies, and that it is merely the result of mental anxiety, etc., is only one of the absurdities thrown up on the surface of medical doctrine, and hardly deserves mention, much less serious refutation."

But scientific questions are not settled in this summary way, nor has the fear of being thought singular ever long deterred men from asserting what they had come to hold as convictions. That which has been branded as an absurdity has, over and over again in the history of the world,

* Read before the College of Physicians of Philadelphia, December 5, 1883.

come to be established as a fact, and the same may yet be accomplished for the opinion of those who deny the specific nature of rabies or hydrophobia. One thing is sure, viz.: that the attitude of severe criticism seems to offer the only hope for the solution of the riddle of hydrophobia, since, in more than two thousand years, the acceptance and repetition of authoritative opinions have failed to furnish a theory which does not fly in the face of all analogy, or a practice which holds out a reasonable hope of saving a single life. Such is the real state of knowledge in regard to hydrophobia. The theories as to its nature are contradictory and illogical, the teachings as to its treatment are without the slightest hope of success. In regard to both, the ablest men who have discussed it occasionally or systematically are in irreconcilable opposition. While some hold to certain modes of communication, others strenuously deny them. While some admit its spontaneous origin, others will not admit it for a moment. While some think the virus is to be found in the saliva, the blood, the bronchial mucus, the milk, the flesh of rabid animals, others limit it to the first of these alone. In regard to the period of incubation, the widest divergence of opinion exists. The range is from one day to forty years, and no one seems to have been able to fix a limit to either its shortness or its length. Equal contradiction meets the gaze when one turns to the matter of treatment. From the throwing into a fish-pond, as practiced by Celsus, to the inhalation of oxygen, as recently practiced by Drs. Schmidt and Zebeden, there is a variety of methods which demonstrate how utterly every attempt to find a specific has lacked the guidance of any accurate idea as to the nature of the disorder. To almost any statement of men whose names are highly respected in medicine may be opposed the most positive and contradictory statements of others equally respected. Virchow admits (*"Handb. d. spec. Path. und Therap."*, "Wuthkrankheit und Wasser-scheu") that hydrophobia may be communicated by means of weapons used to kill mad dogs with, and by blood-letting and scarifying instruments—a belief which, but for Virchow's adherence to it, would be correctly designated as obsolete, and which is entirely unworthy of acceptance. Bollinger, a distinguished veterinarian, admits (*von Ziemssen's "Cyclop."*, art. "Hydrophobia") the possibility of infection by the migrations of animal parasites, such as fleas and lice.*

The late Dr. George B. Wood admitted the possibility of hydrophobia being caused by the bite of birds, and explains why this does not often occur, as owing to the fact that these animals, like horses, asses, and oxen, do not usually bite (*"Practice of Medicine,"* vol. ii, art. "Hydrophobia"). In view of these facts, it will not seem so remarkable that Sauvages believed the eyes of hydrophobic patients shone at night, like those of cats, or that he

should explain this on "meaque de hydrophobia theoria, quae admittit in hoc morbo fluidum illud in phosphoricam activitatem exaltatum" (*"Nosologia Methodica, Vesaniae,"* vol. ii, p. 232). Nor can one wonder that Mead, about a hundred years ago, should have said: "The influence of the moon in these cases, I am convinced, is of some weight" (*"Medical Works,"* art. "Hydrophobia," p. 62).

But, to return to modern times, what shall one think of the attempt of Doléris, the author of the, in many respects, admirable article on this subject in the *"Nouveau dictionnaire de médecine et de chirurgie"* (1881), to explain the assertion of the occurrence of spontaneous cases by saying that the disorder may be acquired from germs distributed in the air and earth, like "charbon"? Or, how shall we consider the willingness of Sir Thomas Watson (*"Nineteenth Century Review,"* December, 1877) to accept the occurrence of hydrophobia by the infection of sucklings through the medium of the mother's milk? or his statement that the disorder does not occur in Constantinople or Africa, in both of which places it does occur?

But I do not wish to make too much of this aspect of the literature of hydrophobia. I wish to call your attention to the cause of the uncertainties which prevail in regard to it. This is, in my opinion, easy to point out. It is the too great readiness to accept any sort of testimony which may be offered as bearing upon the subject. This fault is to be found in almost all the works treating of hydrophobia, from the earliest ages to the present time. This led Pliny to father such absurdities as the following: "There is a small worm in a dog's tongue, known as *"lytta"* to the Greeks; if this is removed from the animal while a pup, it will never become mad or lose its appetite. This worm, after being carried thrice round a fire, is given to persons who have been bitten by a mad dog to prevent them from becoming mad. This madness, too, is prevented by eating a cock's brains; but the virtue of these brains lasts for one year only, and no more." And, again: "So virulent is the poison of the mad dog that its very urine, even if trod upon, is injurious, more particularly if the person has any ulcerous sores about him. The proper remedy in such a case is to apply horse-dung, sprinkled with vinegar and warmed in a fig" (Pliny, *"Natural History,"* Book XXIX, Chapter 32, translated by Bostock and Riley). This same too easy acceptance of testimony led such a writer as Dr. Samuel Bardsley, in 1807, to accept the statement that hydrophobia could be communicated by the mere application of the saliva to the unbroken skin, and to cite with apparent approval a story of a man who had hydrophobia from kissing a mad dog previous to its being hanged (Samuel Argent Bardsley, *"Med. Reports,"* London, 1807). And, most recently, it has led Bollinger, already referred to, to attribute the disorder to drinking the milk of an affected animal, and to the act of coitus (*von Ziemssen's "Cyclopaedia,"* 1875), while Mr. Williams, in his valuable work on *"Veterinary Medicine,"* third edition, 1882, says rabies can be communicated through a "thin epidermis, without wound or abrasion."

These citations illustrate the most remarkable feature of the literature of hydrophobia. It would seem as if, when

* This curious idea is founded upon a reference which, when I hunted it up, I found to be a pure assumption of a Dr. McCrae (*"Lancet,"* March 23, 1872, p. 420), that the occurrence of small-pox, thirteen miles northeast from Melbourne, where it was also present, was to be accounted for only on the supposition that it was conveyed by flies. It has been interesting to observe, in my investigations, how this supposition of Dr. McCrae's has grown to a statement of an established fact, as it has been quoted by foreign writers,

once the mind has accepted a theory which contradicts all experience in other and fairly well understood diseases, it loses the ability to distinguish good evidence from bad. A striking illustration of this is furnished by Dr. Dolan, in his otherwise capital book on hydrophobia or rabies. In his second chapter this writer calls attention in detail to the rules laid down by Dr. Abercrombie, in his inquiries concerning the intellectual powers and the investigation of truth. These warn against the following fallacies: 1. Receiving as facts statements which are not facts, but opinions. 2. Receiving as facts statements which only assume the relation of facts. 3. Receiving as facts general statements, or the generalization of facts. Dr. Dolan then says: "Some writers, for instance, have maintained with much confidence that a particular state of rigidity of some of the limbs is distinctly characteristic of *ramollissement* of the brain. But further observation has shown that the disease may exist without this symptom, and that this condition of the limbs may appear in connection with other diseases. This observation of facts was in so far correct that this state of limbs does very often accompany *ramollissement* of the brain; the error consisted in giving it as a general fact, or a fact applicable to all cases of *ramollissement*, which is without foundation. Yet such statements, when brought forward with confidence, are often received as facts and rested upon as established principles, and then the facts by which their fallacy might be detected are apt to be overlooked or forgotten." To this reference to the commonest sources of fallacy Dr. Dolan adds: "We are arming our readers against ourselves." And yet he goes on, apparently with his eyes wide open, to reproduce the fault he has just pointed out in speaking of *ramollissement*, accepting statements which ought not to be entertained for a moment in the discussion of so grave and delicate a subject, and admitting as genuine cases which are transparently spurious. I will give an example of this latter mistake which illustrates several points at once. Dr. Dolan gives in his collection of cases, and, after sifting his material, stamps as genuine, the following, from Romberg's "Diseases of the Nervous System":

"CASE LXXIV.—Frederick L., male, aged six, bitten on the second finger of the left hand by a dog which had already bitten several other children. Result and time of attack, three months. Fatal, third day. *Treatment*: A few of the dog's hairs had been cut off to place upon the wound, which in eight days was completely healed. The treatment consisted in taking twelve ounces of blood from the arm, scarifying, and applying cantharides ointment to the cicatrix, rubbing in a scruple of mercurial ointment into the inner surface of the left arm. Dr. Horn also visited the boy, and described his features as expressive of extreme anxiety, while his eyes told a tale of immeasurable misery. He implored that he might not be touched or bled again, as he desired nothing more than to be allowed perfect rest." The post-mortem was made on the 4th of September, 1820, twenty-five hours after death. The smell of putrefaction was already developed. The muscles were dark red. The lungs were charged with blood. The larynx, the trachea, and œsophagus were not abnormal in appearance. But the record says: "The redness of the heart was remarkable, the arteries and veins on its surface looking as if they had been injected. The mitral and aortic valves presented a scarlet line, the trabeculæ carneæ were

darker than usual, the internal surface of the aorta was of a bright red hue as far as the arch; the blood contained in the vessels was dark and fluid; the inner surface of the stomach was as pale as that of the œsophagus. No morbid change was found in any other abdominal organ. At the urgent request of the parents, the head was not examined."

The history of this case, as originally described in Romberg's book ("Nervous Diseases," translation, London, 1853), taken together with the post-mortem appearances, seems to me to show it to have been one of acute endocarditis, probably septicæmic. But no such idea seems to have entered the heads of the physicians who attended it. As a case of hydrophobia they went most heroically to work to treat it. Picture to yourselves the scene. Think of that little child, only six years old, tested with the useless and dangerous tests of hand-washing and mirror, and with urine sprinkled on his skin—the former showing nothing, the latter causing a paroxysm. Think of his being bled, the cicatrix being scarified and blistered with cantharides, and mercurial ointment being rubbed into his arm. Then fancy him, when the doctors came at him after an interval, imploring only to be left in peace, while they, with grim determination, bled him again and dosed him with calomel, after which, to quote Romberg literally, "death came to his relief."

In reporting this as a case of hydrophobia, Dr. Dolan has followed the opinion of Romberg, who, when he recorded it, had *never before seen a case*. But it strikes me as a very piteous illustration of the truth of what White said ("Doubts of Hydrophobia," London, 1826) of the course of many cases. He described the usual alarm, the fear of the patient, the suspicion of the doctor, the test with water, the melancholy conviction of doctor and patient, adding: "The patient and himself, therefore, will soon *make out a case*—the one dies, and the other publishes an account of his end." Does it seem unfair to apply such an expression to such a case as has just been cited? On the contrary, does not the history of the case indicate that general eminence in medical science gives no guarantee of infallibility when this vexed subject is approached?

I have selected an illustration of the point I wished to make which should include two names well known and justly distinguished, because their very excellences add force to the proof they furnish that the prepossession of a theory which at the outset demands a certain surrender of the judgment will impair the freedom of the judgment at every subsequent step. Such it seems to me is the condition in which every believer in the specific nature of hydrophobia stands. The assumption of a specific virus which, and which alone, is the originator of the disease in any individual compels its adherents to bend their judgment to accept the belief that there is a virus which behaves in a way contradictory to that of every other virus about which we have any positive knowledge. As Lorinser has said ("Wien. med. Wochenschrift," 1874): "We know very well the appearances produced, for example, by the bite of poisonous serpents, or by the poisoning of wounds with the poison of glanders, anthrax, syphilis, or cadaveric poison. There are, in general, always the manifestations of more or less rapidly developed inflammation, and of further distribution of the

poison through the lymphatics, veins, and lymphatic glands, which organs then, in like manner, manifest similar inflammatory symptoms. Nothing of the kind do we see in wounds made by the bites of mad dogs," etc. And, again: "We know, in all pathology, not a single infective disease which, in regard to the time and symptoms of development, bears the slightest resemblance to hydrophobia."

One might suppose that such a contradiction would lead observers to be constantly on the lookout to find some other way of explaining the phenomena of hydrophobia, and that everything that was presented as evidence in support of it would be subjected to the most rigid scrutiny. But the literature of the subject shows that the very opposite is the case. The *post hoc propter hoc* argument is the one which rules here. A careful perusal of a large number of recorded cases leaves the impression that they have not been studied with any idea that they might be something else than what they appeared to be. Though it is no secret that the dread of water is a symptom of a great variety of affections, one finds, over and over again, the ablest men resting a diagnosis on this, which is acknowledged by most systematic writers to be the least reliable of its signs. Another thing which has struck me in examining the records of cases is the readiness with which reporters, aware of the objection so often raised of the effect of mental influence, accept the statements of friends or the silence of patients in regard to it as evidence that it does not exist. I will give an example of this. In the "Berliner klin. Wochenschrift," September 15, 1879, Dr. Findeisen reports a case of a man who died of hydrophobia, and who is positively stated not to have known that the dog that bit him was mad, or to suspect that he had hydrophobia, or connect his disease with the bite. Yet the record states that, on the second day of his disorder, he cried out that he had been bitten by the "poisonous (*giftiger*) dog," and was not crazy.

Another curious thing to be observed in the literature of hydrophobia is the way in which the madness of the dog is often—one might say usually—deduced from the diagnosis of hydrophobia in the man, instead of the diagnosis of hydrophobia being made to rest upon reliable evidence that the dog was really mad. It is uncommon to find any proof whatever that a dog to which hydrophobia is attributed was rabid, this being, with rare exceptions, a pure assumption. The one phenomenon of a dread of water usually determines the conviction of the physician that he has a case of hydrophobia before him, and settles his opinion of any dog that may ever have bitten the patient, and can not now be accounted for. Nay, more: this mode of reasoning has led certain writers to the assertion that there may be a passing state in dogs in which they may communicate to a human being hydrophobia, but themselves recover. Thus is the struggle to support the specific theory kept up when circumstances seem to be most adverse to it.

Once more, and I am done for this occasion with objections to the anomalies which one meets in examining the basis upon which the general belief in regard to hydrophobia rests. I find in the recorded cases, with very rare exceptions, that, when once hydrophobia is suspected, every

phenomenon that occurs during life, every lesion that is found post mortem, is unhesitatingly set down as a feature of this disorder; and the idea does not seem to be entertained that many of them are grounds of suspicion that some other disorder is present. In this way all lines of distinction between hydrophobia and disorders which simulate it are erased; and it remains for every medical man who is called to a patient who has a dread of water, accompanied with exaltation of reflex excitability, to inquire for a bite or scratch of a dog or cat; if one can not be drawn out, to assume that it has been received and forgotten; then to make a diagnosis of hydrophobia; after which it is only necessary for the patient to die to make a complete record. If to this be added a careful microscopical examination of the state of the brain and spinal cord, the observer will have an exact counterpart of the process by which the famous conclusions of certain investigators—often quoted by those who have not taken the pains to go to the evidence upon which they are founded—were arrived at.

This suggests a brief consideration of the pathological lesions of hydrophobia. Notwithstanding all the diligent endeavors made to learn something from the post-mortem examination of the bodies of dogs and men that have died of rabies or hydrophobia, one might to-day adopt the language of Dr. Hart, who declares (Cooper's "Surgical Dictionary," art. "Hydrophobia") that these examinations afford "little else than a varied mass of symptoms, common to other nervous and blood disorders," and fail to "throw any clear light on the pathology of the disease."

I will not trouble you with the disappointed anticipations of the ancients in this connection; those of modern times are more instructive. The announcement by Hallier, in 1872, of the discovery of a micrococcus which was the germ of hydrophobia, and to which he gave the positive name of "lyssophyton," and the belief of Klebs in the parasitic nature of the granular elements found around the blood-vessels near the scar, have appeared and disappeared within the last decade. The hasty statement of Pasteur that he had obtained from the saliva of a patient dying of rabies a peculiar germ, which, when he had cultivated it and inoculated the product, gave rise to a hitherto unknown disease, he was compelled to withdraw almost as soon as he had made it.*

The investigations of Benedikt, Coats, and Gowers are of the greatest interest in connection with this part of our subject. They are oftenspoken of as if their results were identical and conclusive, although, in fact, they are neither. Dr. Benedikt published his investigations in 1875, in Virchow's "Archiv." The text is accompanied with a plate, which leaves little room for misunderstanding the author's meaning. The lesions described and figured consist of a perivascular exudation or extravasation (or both) of red blood

* Nothing daunted by the experience of others, I observe that Dr. Paul Gibier reported to the Acad. des Sciences, of Paris, on the 11th of June, 1883, that he had found a special organism in the rachidian fluid of animals that had died of rabies, and that the virus could be attenuated by means of cold. Another of the conclusions he announced at that time was that the disease is communicable from mother to fœtus!

corpuscles, miliary spots of finely granular degeneration of the brain substance, "miliary abscesses," and melting down of effusions so as to make hyaline bodies alongside of the blood-vessels, often closing their lumen, while the vessels had a pigmented encasement (Pigmenthülle), made up of red blood corpuscles. These lesions were found in both dogs and men. Dr. Coats published his discoveries in the "Medico-Chirurgical Transactions" in 1878, accompanied also with plates. His investigations referred to tetanus and hydrophobia. He makes a point of the analogies between these two disorders, and, assuming a virus in hydrophobia, he argues backward that there is a poison circulating in the blood in tetanus. The lesions he describes in hydrophobia consist of a perivascular infiltration with *white* blood corpuscles.

In comparing these investigations it is to be noted that the lesions Coats found in tetanus correspond much more closely with those of Benedikt, found in hydrophobia, than do those the former found in his investigation of this latter disorder. Further, it is to be noted that he describes the perivascular infiltrate as consisting of *white* corpuscles, while Benedikt is clear in describing it as made up of *red* corpuscles. Finally, Coats does not consider (though most persons who refer to him speak as if he did) the lesions he found to be distinctive of hydrophobia, but simply evidence of irritation in the blood. Thus we see that these two investigators can not be regarded as confirming each other.

Now, the association of the name of Dr. Gowers (whose investigations are described and illustrated in the "Trans. of the Path. Soc. of London," vol. xxviii, 1877) with those of Benedikt and Coats, as having found lesions pathognomonic of hydrophobia, is equally unwarranted, for he distinctly stated, in answer to a question at the meeting where he demonstrated his specimens ("Lancet," June 9, 1877, p. 840), that his investigation did not lead him to believe there was any special lesion in hydrophobia.

But, inconclusive and conflicting as the results of all these careful investigations have been, it might be easy to see how they might be taken for more than they are worth if it were not for the fact that they have been formally and categorically vitiated by the subsequent investigations of others. Thus, Middleton ("Journal of Anatomy and Physiology," 1881) has published the results of microscopical examinations in which he found perivascular aggregations of round cells in two cases of hydrophobia, corroborating some of the appearances described by Benedikt, but disagreeing with Coats and Kolesnikoff in essential points. But the most striking point of his publication lies in the fact that he found the same morbid appearances which were present in the cases of hydrophobia, in cases of pupura hæmorrhagica, diabetes, fracture of the skull, erysipelas, head injury with hæmatoma, concussion of the brain with fracture of the spine, delirium tremens, peritonitis, tubercular meningitis, mental deficiency and excitement, hæmatoma, tetanus, and uræmia! His paper concludes with the distinct avowal that, "as regards the pathology of hydrophobia, it still remains true that nothing characteristic has been observed."

Another investigator, who has gone over this ground and come to conclusions as destructive as those of Middle-

ton, is Ivanoff, who says ("London Med. Record," March 15, 1883, from "Vratch," 1882, No. 15) that similar appearances to those observed by Benedikt, Gowers, and others are found in typhoid fever. One of the supposed characteristics, the transparent spaces, he says, was found by Popoff and Stephanoff in uræmia, and by Vinogradoff in intermittent fever, by Danillo in phosphorus poisoning, and by himself and Dr. Czorkov in the brains of healthy dogs. They have no pathological character whatever.

But I need not detain you with further references to more or less famous investigations. I will only add that they all tend to confirm the opinion that as yet no gross or microscopical lesion has been discovered which can be regarded as pathognomonic of rabies or hydrophobia.

And now I must close. I have not said so much because it is any pleasanter or is likely to be any easier for me than for others to differ from the majority in the branch of science to which my life is given. It is with shrinking that I take a position which, if it is deemed worthy of notice, will be apt to excite opposition, perhaps condemnation. But I have now been engaged for nearly two years in a laborious study of the evidences upon which the general belief in regard to hydrophobia rests, and I have been gradually led to certain convictions different from those with which I started, and which I feel it my duty to make public.

One of these is that hydrophobia is not a specific, inoculable disease, derived from the bite of a similarly affected animal. Another is that, if we wish to have an accurate, scientific knowledge of what too often actually takes place, and is usually called hydrophobia, we must begin the study of it unprejudiced by the views heretofore generally entertained in regard to it, and with canons of criticism very different from those heretofore deemed sufficient.

I know that these convictions are not novel, and that they have been stated and defended with arguments before. I know, too, that they have heretofore failed to secure the assent of the greatest men who in every generation have adorned the profession of medicine. None the less, however, do I believe them to be true, and that the time will come when they will not be—as they have been in the past—characterized as too absurd to be discussed, or decried as too dangerous to be tolerated.

But, however that may be, a sense of duty compels me to join myself to the small minority, whom I think to be on the right side of the question, for truth's sake. Further, in this matter the interests of science are, in an urgent sense, the interests of humanity. For this reason one who feels strongly must speak boldly. This, then, is my apology to those who may think I have erred in opposing the opinions of so many men deservedly honored and respected in our profession.

THE "BRITISH MEDICAL JOURNAL" states that its weekly issue amounts to eleven thousand six hundred and fifty copies—a circulation, it asserts, about equal to the combined circulation of all the other weekly medical journals published in England. As the journal gives the number of members of the British Medical Association as ten thousand and fifty, to each of whom a copy is furnished, it follows that its circulation among non-members, including the exchange-list, amounts to only sixteen hundred.

BRAIN EXHAUSTION,* AND ITS TREATMENT.

By J. LEONARD CORNING, M. D.,

NEW YORK.

MR. PRESIDENT AND GENTLEMEN: The subject which I have selected for the discussion of your honorable body this evening is one which, by reason of its vast influence upon human affairs, is eminently worthy of scientific attention. Side by side with the progressive intellection of the century there have accumulated a host of clinical data, which point to a progressive decrepitude in the effectiveness of the thought mechanism itself. With the various advances in the mechanical facilities which place the individual in more complete harmony with extraneous conditions, it is a melancholy fact that a concomitant dissonance in the mental economy of the individual himself has become quite as characteristic a symptom of the progress of civilization as the advances in the mechanical arts or the exact sciences.

Therefore, in spite of the conquests over external nature, there is very much still to be learned concerning that thought mechanism the progressive manifestations of which have given us the astonishing control over the external world which is so characteristic a feature of the age.

Whereas the great question among individuals and nations has been, and must of necessity always continue to be, how to make surrounding nature subservient to the ends of organic life, there is yet another problem, which would appear to be the direct outgrowth of the heated competition of modern life, and which demands that, in the struggle for existence, the individual shall not only harmonize with his environment, but shall also be in accord with himself—shall preserve his physiological integrity in spite of the storm without. Among muscle-workers the question is one involving the normal assimilation and the conversion of forces into heat and mechanical labor. To the brain-worker the problem involves, in a modified degree, not only all that is contained in the foregoing, but, in addition, the whole question of mental economies.

We know of an inadequacy of the functional capacity of the motor apparatus dependent upon malnutrition of the muscle itself. We are also cognizant of a similar state of things affecting the organ of thought. It is of this impairment—this exhaustion of the functional capacity of the thought mechanism—that I would speak this evening.

Under the designation cerebral exhaustion I propose to consider a group of clinical phenomena, the chief feature of which is a morbid limitation of the ratiocinative capacity of the individual consequent upon functional brain disease.

The manifestations of cerebral exhaustion are chiefly comprised under the following headings:

Psychical Symptoms.

1. Morbid Limitation of the Ratiocinative Processes.
2. Morbid Emotional Phenomena.
3. Derangements of Memory.

4. Volitional Impairment.
5. Evanescent Mental Confusion.
6. Disorders of Sleep—Morbid Dreams.
7. Lack of Mental Concentrativeness.

Physical Symptoms.

8. Ocular Symptoms.
9. Acoustic Symptoms.
10. Vaso-motor Disturbances and Cardiac Derangements.
11. Local Head Pains.

Secondary Symptoms, sometimes consecutive to or accompanying the Primary Exhaustion.

12. Insufficiency of Voluntary Muscular Power.
13. Morbid Fears.
14. Lachrymose Condition in the Male (wrongly designated Hysterical).
15. Morbid Sexual Manifestations.

It will be more expedient to discuss these symptoms, as far as possible, in the clinical order of their occurrence rather than to follow the purely mechanical subdivision just indicated.

First, as to the more prominent characteristics of the disorder. The first symptom often noted in cases of cerebral exhaustion is great restlessness during the day and more or less wakefulness at night. During the early morning hours there is often present a marked degree of drowsiness, and the persons thus afflicted frequently complain that they do not awake till midday. Soon the disturbance becomes greater; pains are felt in the regions of the vertex or above the superciliary arches. These pains are frequently produced by the most trivial mental exertion. I am at present attending a gentleman who, after reading the newspaper for only five or six minutes, is attacked by a most intolerable vertical pain. Sometimes the pains are occipital, and then the application of the faradaic current will often suffice to dissipate the symptoms.

In cases of unilateral or vertical headache, however, the problem is not so simple, the disagreeable symptoms often requiring more or less protracted treatment for their dissipation. The head pains are soon followed by mental phenomena of considerable intensity. The afflicted person complains of great mental lassitude, often bordering on absolute prostration. Even the slightest mental exertion is painful, and soon difficulty is experienced in performing even those semi-automatic mental operations which are incident to every-day life. Disorders of memory are among the most frequent symptoms. Sometimes the memory for both past and recent events is impaired; but I have remarked in very many instances that, while early occurrences are recalled with sufficient facility and accuracy, recent events make but slight impression, the individual being sometimes unable to tell chronologically what has occupied his attention even during the past few days. Familiar names and numbers are forgotten with particular readiness. When the disorder has continued for a considerable length of time, the will is seen to be impaired—so much so, in fact, that even the most trivial voluntary actions are a source of discomfort. To

* Read before the Medical Society of the County of New York, November 26, 1883.

this condition of volitional impairment is added a high degree of morbid irritability. Small disappointments are magnified a thousandfold, and those occurrences which under normal conditions would be deemed trivial assume overwhelming proportions. Frequent outbursts of uncontrollable anger, upon the slightest provocation, are among the most characteristic phenomena observed at this time, and are followed by more or less depression.

Among the most striking physical symptoms which point to the derangements in the cerebral economy are the disorders of the vaso-motor system.

When even slightly irritated or excited, the face becomes livid, whereas feet and hands are at the same time often cool to the touch. If now the radial pulse be examined, it will frequently be found to be quick and thready, whereas when the finger is placed upon the carotid or temporal artery the pulsation is found to be unusually strong. There is often present in these cases a tendency to abnormal cardiac action, palpitations being among the very frequent accidents. Hyperæmia is, however, by no means always a constant factor. On the contrary, the condition of mental exhaustion is in a very large number of instances found in conjunction with very considerable general or local anæmia, or both. Under these circumstances the two conditions of cerebral hyperæmia and anæmia very frequently alternate with each other; and it is perfectly clear that, according to whether the subject is seen during a period of cerebral plethora or anæmia, will be the diagnosis of the vascular condition. This circumstance has given rise, it would seem, to erroneous interpretations in many instances. These vascular derangements, though of secondary origin, being the direct outgrowth of an irritation of the protoplasm of the cells concerned in the evolution of mind and transmitted thence to the vaso-motor apparatus in the medulla by channels, which anatomy and physiology have not as yet satisfactorily demonstrated, are of the utmost importance on account of the irritation which they in their turn exercise upon the already irritated cortical area. Consequently they deserve especial attention in any consistent plan of therapy, and it will, therefore, not be a matter of surprise that a certain degree of prominence has been assigned to their treatment. In a recent monograph I have detailed at some length the experimental researches of myself and others concerning the relation of the cerebral circulation to brain function. Viewed in the light of those inductive researches which I have only time to briefly refer to on the present occasion, the importance ascribed to these circulatory anomalies will be perfectly comprehensible. Very noteworthy are the ocular appearances in the early as well as in the more advanced periods of the disease. Particularly characteristic is a dead and "bottomless" aspect, which, though hard to describe, when once seen is never forgotten.

Where the vascular derangements were more or less unilateral, I have sometimes remarked an unevenness of the pupil, as well as local spasms in the adductor pollicis and other small muscles of the hand. These latter symptoms, however, are comparatively infrequent. Tinnitus is not seldom met with, especially at night. When the disease has

continued for a considerable length of time the condition of depression, alternating with outbursts of anger, becomes more and more pronounced until the subject is reduced to a deplorable state—often bordering on suicide. Friends, society, and even solitude become subjects of aversion and apprehension, the morbid dread often assuming fantastic and unexpected forms. For my own part, I have found these manifestations of morbid fear so manifold that specific designations have appeared to me superfluous, though others have made attempts in this direction. During the hours of morbid wakefulness hallucinations may occur, and, when this is the case, the mental condition of the patient may be considered more or less critical, unless energetic treatment should cause an abatement of the grave symptoms.

Before entering upon the discussion of what has appeared to me to be the most effective method of treatment to be pursued under the clinical circumstances, which I have just sought to describe chronologically, as far as possible, one word in regard to the *causation* of the above state of mental insufficiency. *As predisposing factors may be mentioned:* 1. That form of diathesis known as *nervous*, in which, although the temporary effectiveness of both the motor and physical apparatus is great, there is at the same time very little capacity for husbanding reserve energy. 2. Certain geographical peculiarities, and atmospheric conditions associated with diminished pressure and other factors of which we are still ignorant. 3. Occupations necessitating an abnormal amount of mental exertion. 4. The extreme subdivisions of labor, both mental and physical, incident to modern specialization, necessitating morbid concentration and excluding the rest formerly derived from employments requiring more general acquisition and a greater field of activity. *Exciting causes are:* 1. Extreme mental worry, accompanied by excessive mental exertion. 2. Constitutional drain through excesses—particularly sexual. 3. Malnutrition, general anæmia, and, 4, menstrual derangements. 5. Derangements of sleep, involving insufficient repair of the cortical cells concerned in intellection, and eventually resulting in the predominance of the processes of disintegration over those of integration in the central nervous system. 6. Certain organic diseases involving excessive waste, more particularly renal troubles, when accompanied by any considerable output of mental energy, may result in cerebral exhaustion. 7. Spasmodic, unsystematic, desultory methods of intellection. 8. Mental shock: Disappointment, profound grief, pecuniary losses; in a word, all those accidents which, acting with more than ordinary severity upon the psychical centers, cause, primarily, a derangement in sleep—a discrepancy between waste and repair, and, as a secondary consequence, chronic inability on the part of the cell to hoard up the physiological amount of explosive energy: hence the inability of those suffering from the disorder under consideration to continue any species of mental work for a considerable length of time without resorting to more or less prolonged periods of repose. In exquisite cases, reading, writing, or even a moderate amount of thought, can only be continued for a few minutes.

From the foregoing considerations it is evident that the essential pathological condition is one of defective nutrition,

comprising not only very considerable secondary vaso-motor anomalies, but, what is of the very first importance, insufficiency in the nutrition of the cell itself.

Admitting the foregoing to be the proper pathological interpretation of the morbid symptomatic phenomena, I know of but one rational system of therapeutics to be adopted in these cases; in a word, the problem presented for solution is how to again replenish the exhausted brain resources, and at the same time to improve the deteriorated mechanism of supply. In other words, the treatment must be addressed not only to the regulation of the morbid circulatory phenomena, but also to the stimulation and eventual restoration of the energy of the cell itself. The great factor in the successful treatment of this class of cases is rest—perfect, undisturbed tranquillity of the thinking apparatus—not the limited amount of rest suited to the healthy brain, but a quantity greater in proportion to the degree of morbid deterioration. By prolonged sleep it is possible for the ganglia to hoard up an amount of energy proportionate to the duration and profundity of the sleep itself, or, in other words, in the ratio of the reduction of the daily output of brain energy. Thus by slow degrees the proper correlation between integration and disintegration may be re-established. It is useless, however, to hope for any permanent results at once, for, when the perverted nutritive conditions have once become established, nothing short of prolonged rest can by any possibility result in the re-establishment of the normal nutritive processes of the cell economy.

The practical problem of cerebral rest I have sought to systematize as far as possible; but in communications on this subject have not forgotten to exhibit the many-sided aspect of the question. Indeed, it is sufficiently clear that the solution of this question is not to be compassed by one idea; there are no specifics here. What is required, however, is a comprehensive, practical, consistent plan of treatment—one based on the physiological and clinical exigencies. Where the function of sleep is affected, as it is in the majority of cases, it is impossible to increase at once the amount of rest to a sufficient extent to meet the demands of the morbid cerebral condition. Nevertheless, by gradually increasing the duration of the sleeping period, it eventually becomes possible to afford the patient an amount of rest sufficient to neutralize by slow degrees the condition of irritation and exhaustion. The bromides should be given during the day in cumulative doses, in order to allay the condition of irritability, and to cause a progressive decline in the mental manifestations as the hour for complete repose approaches. There should be no hesitation in employing sedatives, but always with the understanding that their use is only a measure of temporary expediency. Although I have found that in such cases permanent good is only to be obtained through the agency of protracted rest, a persistent course of tonic treatment should be undertaken as well. Thus, the fluid extract of coca, taken with claret or Burgundy, has an immediately stimulating effect in those cases. In cases of general anæmia, strychnine, iron, and the phosphates may be given. The most difficult class of cases to manage is that in which there is present some stomachic weakness precluding the possibility of any considerable medi-

cation, and necessitating a more or less protracted discontinuance of treatment from time to time. Phosphorus is a remedy which, in these derangements, often yields most excellent results; and although opinion differs as to whether the amount of phosphorus excreted is increased or not by an exercise of the intellectual faculties, the fact still remains that excellent therapeutic results are obtained from the employment of this remedy.

A systematic feeding is another factor of paramount importance in the treatment of these cases; without it the good results obtainable by absolute rest are greatly lessened.

In closing these very general remarks, I can not refrain from adding a word respecting the method by which I seek to practically carry out the above principles of treatment, namely: 1, Cerebral rest; 2, increased general and cerebral nutrition; 3, elimination of psychical irritation.

The subject is secluded in a darkened room from ten to fifteen hours at a time, according to the amount of sleep which it is desired shall be had during the twenty-four hours. The amount of sleep is *progressively* increased by habit, moderate medication, and hydro-therapy, and no attempt is made to produce a sudden state of stupor by the reckless use of sedatives. When the patient awakes, as is usually the case, two or even three times during the hours set apart for rest, nourishment is administered, but always in a fluid and easily digested form. Where difficulty is experienced in again falling asleep, resort is had in the beginning to limited medication. The few hours of wakefulness are devoted exclusively to some form of amusement—reading, writing, and even the mildest forms of mental concentration being absolutely prohibited. This, in brief, is the method from which I have already seen most happy results, and from the employment of which I hope and believe much good will in future be derived. It is hardly necessary to say that the problem of cerebral rest is essentially different and presents many more difficulties than spinal rest. To give repose to the motor cells of the cord is comparatively an easy problem, and one which only exacts a permanent fixation of the motor apparatus for its solution, the consciousness or unconsciousness of the individual being only a matter of secondary importance. Rest, however, for those cells, the function of which is the evolution of mind, can only be obtained by a prolonged period of absolute unconsciousness; and this, as a matter of course, will often tax the patience and resources of the physician to the utmost. Perseverance and the utilization of the principle of habit will usually, however, render essential assistance.

A CASE OF BILATERAL SEPARATION OF THE EXTENSOR TENDONS

FROM THE PATELLAR INSERTION.

By V. P. GIBNEY, M.D.

A MAN, fifty-eight years of age, came under observation in the Out-door Department of the Hospital for the Ruptured and Crippled, October 18, 1883. Ten years before, he fell, detaching the quadriceps extensor, on the right side, from the patella. Six years later the same accident occurred on the left side,

During the past winter the right knee became the seat of arthritis, was treated in a hospital, and, from the account he gives, there was profuse suppuration.

It seems the knee was opened and washed out several times and the wound then healed.

The peculiarity of his gait on the date of his first appearance at the dispensary was interesting, and, on examination, the quadriceps extensors on either side seemed to be entirely gone, so that the finger could be thrust behind the superior border of the patellæ and rest well in the inter-condyloid notches.

While on a level surface he walked fairly well, and, curiously enough, he has very few falls.

If the legs are flexed, he can not extend them at all. The right one can be extended to 170°, and flexed to 75°, passively. There is much grating on passive motion, and the patella is quite immovable. There are several cicatrices about the knee.

The left knee can be flexed and extended passively over normal arcs.

The case presents no further points of interest, and is presented more as a curiosity and an illustration of how well the man can walk without these tendons. The result of the arthritis on the right side is excellent, and another question might arise as to the benefit derived from the absence of the tendons, thus relieving the joint from the patellar pressure.

A CASE OF FOREIGN BODY IN THE RECTUM.

By W. T. OPPENHEIMER, M. D.,

HOUSE SURGEON, BELLEVUE HOSPITAL.

On October 20, 1883, J. C., aged eighteen, was admitted to Bellevue Hospital on account of great pain in his rectum, the pain being intensified whenever he attempted to sit down.

He had the impression that on the previous night, while he was intoxicated, an apple had been forced into the bowel by some of his companions.

An examination with the finger revealed the presence of a globular-shaped body, occupying the rectum about two inches above the external sphincter ani.

Every attempt to pass the finger above the foreign body only resulted in pushing it farther into the gut.

The patient was placed in Sims's position, the blades of a pair of lithotomy forceps were easily introduced, the foreign body grasped, and, by a combination of traction, lateral and rotary movements, it was, with difficulty, removed. It proved to be a large, very hard green pear, measuring three and one half inches by two, with its stem still attached.

Some hæmorrhage attended the operation, and the sphincter was found to be temporarily paralyzed in consequence of the stretching to which it had been subjected.

Patient left the hospital the next day, apparently doing well.

It is generally admitted that, when a conical-shaped body is placed in the rectum, its natural tendency is to take that direction in which there is the least resistance, and so may pass into the colon and lead to a fatal result by causing ulceration, with perforation of the bowel.

The present case is chiefly interesting as a matter of record.

THE NEW YORK EYE AND EAR INFIRMARY has received a gift of \$5,000 from Mr. Royal Phelps, its late president, to whom it is also indebted for many years of wise and prudent management.

Clinical Reports.

NEW YORK HOSPITAL.

CLINICAL REMARKS BY ROBERT F. WEIR, M. D.

Saturday, November 17, 1883.

Limited Empyema.—Stricture of the Rectum; Proctotomy by a New Method.—Stricture of the Urethra; Internal Urethrotomy.

CASE I.—GENTLEMEN: The first of the three cases I shall show you to-day is a case of empyema. You will remember that I have already operated upon three patients with this affection before you during the past few weeks. In two of these, a puncture was made into the pleural cavity by means of a large trocar and cannula, arranged like a tracheotomy-tube, and in one of those instances, as you will also recollect, the rubber catheter which was introduced to effect drainage proved defective, and broke off so that one end of it remained loose in the pleural cavity. For this reason a free incision was made through the chest walls in order to secure and remove this piece of rubber. That patient has since done fairly well. For a time there was a considerable amount of fever and hectic, but, by washing out the pleural cavity daily with a warm disinfectant solution, the amount of pus has been reduced to two or three ounces, the temperature has fallen, and the man is in a better condition, although he is not entirely out of danger. The solution used was either iodine (3 j to the quart) or a 1-to-5,000 corrosive-sublimate solution. In the case of the second patient whose chest was punctured, a rubber drainage-tube was inserted, the outer extremity of which led into a basin containing an antiseptic fluid, by which means a free and continuous exit was given the matter within the chest cavity, while contaminated air was prevented from entering it. After the lapse of about a week or ten days a rubber bag took the place of the basin, into which three or four ounces of purulent serum discharged daily, until at the present time the quantity had diminished to a small amount, and the patient is steadily improving. The third case, you will remember, was that of a man who had, in addition to the presence of pus in the pleural cavity, a certain amount of air, constituting what is called pyo-pneumothorax. It was suspected that in this case, as in a great many other similar cases, the empyema was due to tubercular affection, but the condition within the pleural cavity masked the phthisical signs so that a positive diagnosis could not be made. The disease in this case ran a variable course, first improving and then undergoing a relapse, but finally, a week or ten days ago, the patient died, and at the autopsy both lungs were found to have undergone extensive tubercular degeneration.

The sickness of the patient now shown began eleven days ago. At that time he experienced a severe chill, but the filling of the pleural cavity has been so rapid that it is believed that his disease must have commenced sooner. From the irregular outline of the dullness posteriorly, it is supposed to be encysted, or limited, empyema. But the point of greatest interest to us to-day is the surgical aspect of the case. I have very little to add to my remarks on former occasions, except to mention some statistics which have come to my notice lately. The first of these I observed in the "British Medical Journal" for September 29, 1883, relating to the experience of certain surgeons with empyema as it has occurred in the hospital at Leeds, Eng. The method employed was by making an incision into the pleural cavity, and withdrawing the pus by constant drainage through a rubber catheter. Forty cases were so treated, with only nine deaths, and no deaths in children. Six patients died within two weeks after the operation, two of them from the

influence of the tubercular deposit which existed. Dr. Eddison, Dr. Allbutt, and Dr. Chuston, under whose care these patients were, believe that it is better to do the operation under the antiseptic spray, in order to guard against septic matter entering the pleural cavity when this is first opened. This precaution will be omitted in the present case for the reason that a cannula and trocar will be used to which a rubber tube is attached leading underneath an antiseptic solution. It is not thought best to empty the cavity completely at the first sitting, but to do so gradually. This mode of treatment also has an American advocate in Dr. Wilson, of Philadelphia. He makes the puncture with the trocar and cannula, and afterward inserts a soft rubber catheter through the cannula and withdraws the latter. The catheter is retained in position by means of silk thread and strips of adhesive plaster. The cavity is washed by means of a ball syringe and soft rubber tubing, and the solution employed is one of bichloride of mercury, beginning with 1 part to 15,000 and gradually increasing the strength to 1 in 5,000. At the first sitting the amount injected does not exceed one fourth the amount of pus withdrawn. As the cavity contracts, the intervals between the washings are prolonged. During the intervals an oakum pad is applied. When the discharge becomes serous and does not exceed two drachms the tube is withdrawn, and the sinus is permitted to heal. The same plan is pursued when spontaneous opening has taken place.

It has been found better to make but a single opening and employ only one drainage-tube—only exceptionally are two openings necessary. The cases do not always proceed most satisfactorily even after the amount of the discharge has been reduced to one or two ounces. When a standstill is reached, you may try all sorts of antiseptic and stimulant washings, or make a second opening, with through-drainage, and still fail to effect a cure. Perhaps we may be compelled, by the strong tendency on the part of the wound to close by approximation of the ribs, to enlarge the opening by taking out a piece of one or more of the ribs. I remember an instance in which, even after this, a patient went for eight years with an opening in the chest discharging more or less pus, and subjected now and then to inflammatory exacerbations. While at Kiel, last spring, I saw an example of what surgery can do for some of the worst cases of this sort. The pleural walls continued in this case to discharge a copious amount of pus, just as the walls of a bone cavity sometimes do after the removal of a sequestrum, and will not heal from a similar cause. In the case alluded to, Neuber raised a skin flap from the ribs, took out a piece of four or five of the ribs, with the thickened pleura, larger than the palm of the hand, exposed the pulmonary surface which was giving rise to the persistent discharge, scraped it, and laid the raw skin down upon it, which adhered, and closed the secreting pleural cavity. This operation has also been repeated elsewhere satisfactorily, and without distortion of the spine. Acting on the statement of the house surgeon that he had observed dullness in the recumbent posture higher up than the spot chosen for my opening, in the sixth space, on a line with the back part of the axilla, I have introduced the trocar and got a "dry tap." The mistake may lead to fresh inflammation, but it will not stand in the way of making a puncture more posteriorly; and I will do now what I should have done at first, and what I hope you will do—introduce the hypodermic needle, get pus, and then push in the trocar and make the incision as may be determined on. Having got this proof, I have removed a quantity of pus, which, as it escapes, gives off a very offensive odor. The further dressing will be conducted according to the plan before mentioned. [Note.—The patient died forty-eight hours later, and the autopsy showed limited empyema from gangrene of the lung. No inflammation had followed the first puncture.]

CASE II.—The case which I am now about to bring before you is one of stricture of the rectum occurring in a colored woman, thirty-six years of age, unmarried, who has never borne children. I asked especially with regard to this point, because prolonged pressure of the child's head on the bowel has been considered one of the common causes of stricture of the rectum. Her rectal trouble began four years ago, when she was told that she had the piles. There was at first a mucous discharge, mingled occasionally with pus, also a condition of constipation which grew more and more severe, and finally she was able to obtain relief only by the use of purgative medicines. The local pain has been slight. Cancer can be excluded mainly by the absence of severe pain, as well as by the smooth feeling of the stricture itself. She has never suffered from syphilis, so that cause may be eliminated. Though it is a veritable one, formerly this was doubted. There is another cause which might exist in the present case—namely, chancreoid ulceration. This poison might be introduced directly, or it might find its way to the rectum from the vagina. I have seen a number of such cases, and in one instance the chancreoid ulceration of the rectum had been of three years' duration. It was finally cured by the actual cautery. This patient had a bubo eight years ago. You will see, therefore, that there is a gap of four years between the time of the occurrence of the bubo and the rectal symptoms—too much, perhaps, for us to put them together as cause and effect. As I examine the patient, I find that the stricture has only a slight amount of induration, that it is situated about two inches from the anus, and that it will admit only the little finger. Above it I can feel smooth but somewhat thickened mucous membrane. It is, therefore, a simple stricture of inflammatory nature, and the cause of the inflammation is uncertain.

The operation which I propose to perform is a modification of the one originally introduced by Verneil. This surgeon carried the wire or chain of an *écraseur* from a point near the coccyx into the gut above the stricture, even as high as four inches from the anus, and cut through the stricture and all intervening tissue. This operation was modified by the English surgeons by making the division of all the tissues complete with the knife, from the bowel down to the coccyx, or even the sacrum, cutting the sphincter and completely. I have performed this latter operation nine times, and in only one case did any considerable hæmorrhage take place, and in that case it was promptly arrested by plugging. Of the nine patients, two died from septic processes contracted in the hospital; the others did well. But there is one serious objection to the operation, namely, that the sphincter, which is divided to the coccyx, regains its power very slowly indeed. Not that incontinence results, but that a suppurating surface is left, rendering the patient very uncomfortable. This may perhaps be remedied by a plastic operation, but I have not yet had an opportunity to try it. Instead of performing either of these operations, I propose to-day, therefore, to stretch the sphincter thoroughly, divide the strictured tissue posteriorly, and, in order to avoid the risk of burrowing about the rectum, which such incisions generally cause, make a complete artificial fistula by thrusting my scalpel from outside the sphincter through into the wound, and through the tract introduce a draining-tube, apply an iodoform dressing to the internal incision and over the anus, keeping the bowel quiet for several days, and see if by this means the stricture may not be relieved.

The stricture is now divided, and I am able to pass three fingers, and even four, readily into the rectum, while before I could only introduce the tip of the little finger. The operation has been completed after the manner just described. [Note.—No inflammatory reaction having occurred, the tube was withdrawn after four days. The bowels moved only twice in ten

days; nothing escaped through the track of the drainage-tube, and it has apparently closed.]

CASE III.—The third case is one of tight stricture of the urethra just anterior to the triangular ligament, the origin of the trouble being in a gonorrhœa contracted seventeen years ago. Complete retention of urine has never occurred. We see so many of these cases that I will not dwell specially on this one, but will simply state that the stricture will be divided by a Maisonneuve's urethrotome, cutting upward so as to make the urethra admit a No. 32 sound. The only difference from the other cases is, that the urine will be drawn off at the close of the operation, and the bladder washed out with a 1-to-5,000 solution of corrosive sublimate. The urethra will be flushed with the same solution as the catheter is withdrawn. A long soluble bougie of one grain of iodoform, or an injection of two grains of iodoform to the ounce of oil, will be introduced into the urethra once or twice a day. These precautions will be taken to avoid urethral fever, as considerable difficulty was experienced in the introduction of the sound after the stricture was divided, and it was feared that a sharper reaction would occur if altered urine were allowed to flow over a somewhat bruised incision.

Book Notices.

Elements of Histology. By E. KLEIN, M. D., F. R. S., Joint Lecturer on General Anatomy and Physiology in the Medical School of St. Bartholomew's Hospital, London. Illustrated with One Hundred and Eighty-one Engravings. Philadelphia: Henry C. Lea's Son & Co., 1883. 12mo, pp. xii-352. [Students' Series of Manuals.]

This small hand-book is the first in a series of Manuals for Students of Medicine in course of issue by the same publishers. By cutting down the margins, setting the type closely, and the use of thin paper, the book has been kept within small pocket size, without employing type so fine as to be at all difficult to read. This particular volume, for example, contains 347 pages of text and woodcuts, besides a full index. The text is well arranged, and gives a brief but sufficiently full account of most of the recent researches of importance. The genesis of the red and white blood corpuscles, for example, is described without omission of any important discovery among the many which have lately crowded this much-studied field, and covers a wider range than that embraced in any text-book published in English. There is a good deal of comparative embryology, partly introduced by way of illustration, but very largely too as the basis of deductions in human histology, the author not appearing to hesitate to draw positive histological conclusions from one order or class of animals to another. The one hundred and eighty-one woodcuts are uncommonly well drawn and printed, and are also remarkably well selected for their purpose of illustrating and explaining the text. Besides the original drawings (a considerable proportion of the whole number) there are judicious selections from Gluge's "Atlas of Histology," Burdon Sanderson's "Hand-book for the Physiological Laboratory," Henle, Gerlach, E. Fischer, W. Flemming, Key, Retzius, Waldeyer, Heidenhain, Kölliker, etc. The excellence of the cuts is due to the skill of Mr. Charles Berjeau, F. L. S., who has drawn them upon the wood with artistic delicacy as well as technical accuracy.

We have here, in short, a conspectus of the wide field of human histology coming well up to the researches of the present day, and, considering the smallness of its bulk, of truly re-

markable fullness. Many of the faults of execution that we notice are such as may reasonably be expected to be amended in future editions. Such are occasional slips in proof-reading and rather too frequent obscurities of statement; as when the writer speaks of "continuous 'masses' of epithelial cells," or sets down such a sentence as the following: "They (the Haversian canals) are surrounded by *numbers of concentric lamellæ, with the bone corpuscles between them*, and this is a system of *concentric lamellæ*" (p. 53). Sometimes, from insufficient revision, the description of a borrowed cut is allowed to retain terms not explained in the text—an omission likely to perplex the medical students for whom the manual is particularly intended. But a far more serious defect, perhaps the most serious in the book, is the omission of all indication of the number of diameters by which the tissues represented, often very highly magnified, are enlarged. When, as frequently happens, contiguous cuts represent objects viewed under very different amplifications, much of the value of the illustrations is lost to the student.

It is not, to be sure, the custom to burden elementary hand-books with references or foot-notes, but when, as in this case, the pages are crowded with the mention of authorities little known even by name to the general reader, more advanced students will be very glad to accept, in future editions, a small increase in bulk in return for more exact citations of authorities.

On the whole, the "Elements of Histology" bears out well the modest statement of its preface, that "the work contains a good deal that will be acceptable to the advanced student as well as to the beginner," and it may safely be expected to meet with a large sale.

BOOKS AND PAMPHLETS RECEIVED.

Zur Kenntniss der Augenlinse und deren Untersuchungsmethoden. Von Dr. Robinski, prakt. Arzt zu Berlin, etc. Berlin: Eugen Grosser, 1883. Pp. 62.

Index to the Transactions of the American Medical Association. Vols. I-XXXIII. Prepared by William B. Atkinson, M. D., Permanent Secretary. Philadelphia: W. F. Fell & Co., 1883.

The "Medical Record" Visiting List and Physicians' Diary for 1884. New York: William Wood & Co.

The Physician's Pocket Day-Book. Designed by C. Henri Leonard, M. A., M. D., etc. Detroit. [Price, \$1.]

Relation of Eye to Spinal Diseases. By A. Friedenwald, M. D., etc. [Reprint from the "Transactions of the Medical and Chirurgical Faculty of Maryland."]

The Electro-Osteotome. A New Instrument for the Performance of the Operation of Osteotomy. By Dr. Milton Josiah Roberts, Professor of Orthopædic Surgery and Mechanical Therapeutics in the New York Post-graduate Medical School, etc. [Reprint from the "Medical Record."]

Some Recent Progress in Diseases of the Nervous System. By Talbot Jones, M. D., St. Paul. [Reprint from the "Alienist and Neurologist."]

The Antipyretic Treatment of Typhoid Fever. By G. C. Smythe, M. D., Professor of Principles and Practice of Medicine, Central College of Physicians and Surgeons, Indianapolis. [Reprint from the "Cincinnati Lancet and Clinic."]

A Contribution to the Clinical Study of Typhlitis and Perityphlitis. By William Pepper, M. D., LL. D., Provost and Professor of Clinical Medicine in the University of Pennsylvania. [Reprint from the "Transactions of the Medical Society of the State of Pennsylvania."]

New Operation for Rupture of the Perinaeum through the Sphincter. By J. Collins Warren, M. D., Assistant Professor in Surgery in Harvard University, etc. [Reprint from the "Gynaecological Transactions."]

THE
NEW YORK MEDICAL JOURNAL,
A Weekly Review of Medicine.

Published by
D. APPLETON & Co.

Edited by
FRANK P. FOSTER, M. D.

NEW YORK, SATURDAY, DEC. 29, 1883.

THE ABUSE OF MEDICAL CHARITIES.

ATTENTION has often been drawn to the imposition practiced upon charitable institutions, and especially upon their medical officers, by patients who are quite able to pay ordinary medical fees, and to provide themselves with the drugs and appliances usually needed by persons in their condition. There is only too good ground for believing that the abuse is becoming greater and greater every year. Perhaps the fact is fully realized only by the struggling practitioners who have not the advantage of a hospital or dispensary appointment, for it is on them that the burden falls. No one seriously denies it, however, but, alas, nobody seems to have both the will and the power to aid materially in remedying it, although it has been brought forward as a grievance before the medical profession, and laid before the governing boards of several of the institutions concerned. Everybody comprehends how street begging, from having been a thing almost unknown among us a few years ago, has come to be an established nuisance, but, as a community, we have not yet realized that any resident in this land of prosperity can possibly play the pauper except as the result of dire necessity. To some extent, no doubt, the evil is fostered by the avidity with which "clinical material" is seized upon; and, to that extent, the profession has itself to blame. As regards the governing bodies of the hospitals and dispensaries, on the other hand, it can only be supposed that their failure to do anything toward the practical suppression of the evil is the result of a lack of thorough comprehension on their part of its extent and its importance.

A precedent is often of much force under such circumstances, and it is satisfactory to learn that the London Hospital has furnished one in the shape of a notice recently issued for the information of its governors and its out-patients. It may take some time for a London example of this sort to be followed in New York, especially as it is not usual here for out-patients to need a governor's certificate to enable them to get treatment at a hospital or dispensary; but the step taken can scarcely fail to have its influence in the end. The notice in question is to the effect that, on and after January 1, 1884, a waiting-hall inspector will be employed to ascertain whether any applicants presenting governors' letters are able to pay consulting physicians' or surgeons' fees, or, if their cases are not urgent, those of local practitioners; or should be referred to recognized provident institutions; or, being in receipt of parish relief, should be required to attend at poor-law dispensaries. To guard against unnecessary duration of a patient's attendance, a governor's letter will not entitle him to more than one attendance, except by the decision of the medical

officer; and the latter is not at liberty to continue the ticket in force unless, in his opinion, further hospital treatment is necessary. New tickets presented by patients who have been set down as not in need of further treatment will be canceled at once unless the ailment for which they apply is a new one. Untruthful replies to inquiries will work a forfeiture of the ticket.

It is justly suggested that these arrangements, while so limiting the number of patients in attendance as to enable the medical officers to give more of their time to those who really need it, will enhance the value of tickets to governors and subscribers, as well as to those patients who actually require and deserve hospital treatment. The latter consideration has full as much force here as in London, and it is earnestly to be hoped that before long the fact will be recognized by the governing boards of our hospitals.

PHTHISIPHOBIA.

IN view of the eagerness with which men grasp at a positive theory, in place of clinging to the anchor of doubt, and bearing in mind how well-nigh unavoidable the temptation is to view as actual facts whatever the theory seems logically to lead to, it was not altogether an unhappy conceit on the part of Dr. Wilson Fox, of London, when he lately deprecated the prevalence of what he termed "phthisiphobia" in modern society. There can be little doubt that a morbid dread of this sort would be much more likely to seize upon the community if it should come to be generally admitted that accidental inoculation with non-specific matter of various sorts was capable of giving rise to tuberculosis. In the past there has been some danger that such a conclusion would be drawn, chiefly as the result of certain experiments which, while their first effect was to throw doubt on Villemin's idea of the specific and inoculable nature of consumption, seemed to establish the possibility and the danger of setting up a tuberculous process by contaminations of the blood akin to those which must necessarily take place every now and then.

To admit that any one of a great variety of indifferent substances may, on gaining entrance into the circulation, give rise to tuberculosis would clearly be to pave the way to a widespread and almost ineradicable "phthisiphobia" with a certainty attainable by few other means. To wage war against the bacillus, with whatever subtlety observation may compel us to invest it, is to fight a single enemy; to make sure that all manner of foreign material is at every moment barred out from the circulation is impossible. It is comforting to find, therefore, that the experiments to which we have alluded have lately been repeated with results which seem to show that the methods by which they were first carried out must have been faulty in some respect. At a recent meeting of the Pathological Society of London, Dr. Dawson Williams gave an account of his repetition of the old experiments, and cited others of like purport by Mr. Watson Cheyne, and it was on this occasion that Dr. Fox gave expression to the sentiment we have indicated. It was at the request of the latter, indeed, that the experiments were undertaken.

According to the account given in the "British Medical Journal," great pains were taken to guard against tuberculous contamination of the fluids and the instruments used, but no antiseptics were employed. The experiments included the use of putrid fluids and setons, and in no instance did any tubercular or pyæmic process follow. Dr. Williams thinks the evidence is now very strong in favor of the specific theory of tuberculosis, and in favor of the doctrine that the bacillus plays an essential part in the process. Dr. Fox frankly abandoned his former interpretation of the old experiments, and acknowledged that we were now reduced to Villemin's original position. This position, it will be remembered, was, that tuberculosis is specific and inoculable—a conclusion that was purely inductive in the first instance, but supported by experimental researches which now seem to have had restored to them the positive significance of which they had long stood deprived.

But we must not lose sight of the consideration that the experiments which at first seemed to rob them of this significance were never held up as examples of infection in the true sense of the word. They were stumbling-blocks only in so far as they appeared to show what might happen when obviously no *specific* infection had taken place. Such being the case, in the spirit of Dr. Fox's caution against hastily drawing conclusions from pathological experiments, a number of repetitions may yet be necessary to overthrow the conclusions to which the old experiments led, for it may turn out that accidental contamination of the instruments and the solutions used is not enough to account for the diversity of results.

THE CONCURRENT ACTION OF ALCOHOL AND CHLOROFORM.

SEVERAL years ago the French physiologist, M. R. Dubois, published some elaborate investigations, undertaken under the direction of M. Laborde, to determine the influence of alcohol in modifying the action of chloroform on the system. The precision in anæsthetization that has now been made practicable by the experiments of M. Bert has seemed to M. Dubois to call for a repetition of his former study of the matter. Accordingly, he has entered upon the inquiry anew, and publishes the first installment of the results—relating to acute alcoholism only—in a recent number of the "Progrès médical." The investigation as a whole has to deal with three different forms of alcoholism—the acute, the chronic, and the recurrent. The last-mentioned, termed *alcoolisme en retour*, is defined as the particular state observed when an habitual drinker is suddenly deprived of the allowance of spirit which ordinarily keeps him up to what may be called a false normal condition. This form, he points out, should not be confounded with chronic alcoholism, in which the patient is continually taking his accustomed quantity of alcohol.

Confining himself for the present to acute alcoholism, and referring to experiments on dogs acutely poisoned with alcohol, M. Dubois concludes, as the result of the use of a ten-per-cent. admixture of chloroform with air: 1. That the rapidity of anæsthetization is increased during acute alcoholism. 2. That the animal's vital resistance is diminished in duration. 3. That,

consequently, the proportion of chloroform in the anæsthetic mixture may be lowered. 4. That the quantity of the mixture as a whole that it is necessary should enter into the respiratory passages, to produce either anæsthesia or death, is smaller than in the normal condition. 5. That, quite as in animals that have not been subjected to alcoholic intoxication, the reduction of temperature is in direct proportion to the duration of the animal's resistance.

As regards the character of the phenomena that show themselves, it is almost identical in animals that have been alcoholized and in those that have not; and this fact constitutes a well-marked difference between acute alcoholism and the other forms mentioned. In the acute form, M. Dubois remarks, the alcohol would be acting as an adjuvant to the chloroform, and what was gained in rapidity would be lost in resistance.

NEWS ITEMS.

INFECTIOUS DISEASES IN NEW YORK.—We are indebted to the Sanitary Bureau of the Health Department for the following statement of cases and deaths reported during the two weeks ending December 25, 1883:

DISEASES.	Week ending Dec. 18.		Week ending Dec. 25.	
	Cases.	Deaths.	Cases.	Deaths.
Typhus	2	1	0	1
Typhoid Fever.....	22	3	26	5
Scarlet Fever	64	6	65	6
Cerebro-spinal meningitis...	5	4	1	2
Measles	44	13	42	8
Diphtheria.....	42	21	40	24

YELLOW FEVER is reported to have made its appearance in Rio de Janeiro, where, as the warm season is just beginning, its extensive prevalence is to be apprehended.

THE "ARCHIVES OF MEDICINE."—It is announced that with the December number this sterling periodical closes its publication. It is unnecessary to call attention to the great worth of its contents during the few years of its existence; they have embraced many of the most important papers that have emanated from the profession in this country. Notwithstanding its discontinuance, the "Archives" will not soon pass out of the memory of the many who have delighted in its pages.

THE "ARCHIVES OF LARYNGOLOGY."—It is understood that this journal also has now become a thing of the past. To it likewise we must accord the credit of having been a prominent and worthy exponent of an important element in American medicine.

THE HOSPITAL SATURDAY AND SUNDAY ASSOCIATION specially asks that contributions be made to the general fund, which is to be divided among the associated hospitals. Money may be sent to the general treasurer, Mr. Charles Lanier, at No. 26 Nassau Street, before January 15th.

THE LUNATIC ASYLUM ON WARD'S ISLAND was last Friday the scene of an accident that might easily have proved very serious. The upper story of one of the wings took fire, and the fire had made such progress, when it was discovered, that the total destruction of the building was threatened, and the work of removing the patients hastily, and yet with the preservation of order, became a necessity. This was satisfactorily accomplished under the personal direction of the superintendent, Dr. Macdonald, to whom great credit is due.

THE PARIS FACULTY OF MEDICINE.—In our last issue we mentioned the probability that an *agrégé* would be designated to perform the duties of the chair of diseases of children pending the appointing of a successor to the late M. Parrot. In pursuance of that plan, M. Rendu has been chosen for the work.

THE BRITISH MEDICAL ASSOCIATION will hold its next annual meeting in Belfast, Ireland.

THE CARTWRIGHT LECTURES for 1884 will be delivered by Professor Burt G. Wilder, M. D., of Cornell University, at the hall of the Young Men's Christian Association, corner of Twenty-third Street and Fourth Avenue, on the evenings of February 2, 4, and 6, 1884. The general subject will be "Methods of Studying the Brain."

A RECEPTION TO DR. M. JOSIAH ROBERTS, of New York, was given in Pittsburgh, Pa., on Thursday evening by Dr. William H. Daly, of Pittsburgh. Several of Dr. Roberts's professional brethren in New York and Philadelphia, together with a large number of Pittsburgh physicians, were invited to be present.

A LIBEL SUIT having been brought by a member of the medical faculty of the University of Michigan against a newspaper that had charged him with criminal relations with a lady who was his patient, \$20,000 damages were awarded by the jury, and, the case having been appealed, the Supreme Court has affirmed the judgment. Such a charge against a physician is no light matter, and it is a pleasure to be able to record the result of the suit in this instance.

Letters to the Editor.

THE JOHN HANCOCK MUTUAL LIFE INSURANCE COMPANY.

To the Editor of the New York Medical Journal:

SIR: My attention has been called to a letter in a late number of the "New York Medical Journal," signed with the initials A. L. C., relating to the John Hancock Mutual Life Insurance Company of Boston, Mass. As the writer's remarks might have a tendency to mislead, since he has written about a matter of which he is ignorant, I am constrained to answer him, in order that the correct facts may be known. The John Hancock Company, in addition to its regular business, adopted in 1879 the plan of industrial or prudential insurance, based upon a system which has been in most successful operation in England for the past thirty years. Without entering into the particulars of this method of life insurance, it will be simply necessary to state that prudential insurance is designed for the masses, who can not afford to insure their lives for large amounts, but who are enabled by the above plan to take out policies on their own lives and those of their children (within certain ages), for small amounts, by paying small weekly premiums, ranging from five to fifty cents. For all applicants, whether adults or children, the company requires a medical examination; but, as the weekly premiums are so small, it is impossible, as a matter of business, to pay the examiners more than the small fee of twenty-five cents, particularly as the examination of the children, who are usually seen in groups, amounts to but little more than an inspection. Although this fee is recognized as being small, yet at the same time it has been proved that there are certain compensations, apart from the actual sums paid for the examinations (these sums amounting in many cases to fifty, seventy-five, one hundred, one hundred and twenty-five, one hundred and fifty, and even as high as two hundred and sixty dollars, paid to

single examiners for single months' work), compensations growing out of the acquaintance formed, which in many instances has led to such an increase of private practice that examiners have resigned, since they were no longer able to attend to the duties of the company.

Our policy is to appoint as medical examiners in the prudential branch young men who may not be overburdened with practice, and to whom not only is any honest addition to their professional income acceptable, but also any practice derived from a class of persons who, I grant, do not belong to the upper ten thousand. Such a class of examiners we have always been able to find, who have performed their work skillfully and well, to their professional advantage.

Truly yours,

FRANK WELLS,

Medical Examiner, John Hancock Life Ins. Co.

Boston, December 6, 1883.

Proceedings of Societies.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

A CALLED meeting was held December 21, 1883, S. O. VAN DER POEL, M. D., President, in the chair.

THE PREVENTION OF PUERPERAL INFECTION.—Dr. H. J. GARRIGUES read a paper with this title, the object of which was simply to lay before the profession the means by which he had succeeded in freeing the maternity wards at Charity Hospital of puerperal fever. He would leave out of consideration all theorizing regarding the nature of puerperal fever. Brief allusion was made to the history of antiseptics in obstetrics. Dr. Garrigues himself had so far adopted Listerism in midwifery practice during the past eight years as to make it a habit to wash his hands and instruments in a carbolic-acid solution, to make vaginal injections twice daily during the first week after delivery, and to wash out the uterus, when indicated, either as a prophylactic or curative measure. He carried this plan with him to the Maternity Hospital, on becoming one of the visiting physicians. While this hospital had a special board of physicians, it was not an entirely separate institution, but a part of Charity Hospital, and everybody knew how great was the mortality usually among lying-in women in a general hospital. The following statistics for the Maternity Hospital were read:

Year.	No. of deliveries.	Deaths.	Percentage.
1875..	570	15	2.67
1876..	536	20	3.73
1877..	460	32	6.97
1878..	225	7	3.11
1879..	254	11	4.40
1880..	149	8	5.37
1881..	382	9	2.36
1882..	431	14	3.25

While some of the deaths were attributable to diseases for which the hospital was not responsible, the great majority were the effect of hospitalism. During the first nine months of the present year the number of deliveries had been 345, with 30 deaths. During the first three months of this year, while the author was on duty, the number of deliveries was 108; the mortality, 11. Before a recent date it was the exception rather than the rule to see a perfectly normal lying-in period. During the six months from October 1, 1882, to March 1, 1883, when the author of the paper had been on duty last, there were 192 women delivered, 46 of whom, or almost 1 in 4, were seriously sick, 39 of inflammatory puerperal disease. When the author went

on duty, October 1st of the present year, the condition of the hospital was at its worst, nine women having died during the last month, and half a dozen sick puerperæ being left over from the preceding service, one of whom died a few days later. In the mean time bichloride of mercury began to be praised in surgical and obstetrical practice, and he therefore made use of it in the Maternity Hospital. But, not trusting entirely to the virtue of a newly introduced drug, he adopted several other measures, all of which may have contributed somewhat to the excellent results obtained.

The service was divided into two separate departments, one for the sick puerperæ, and the other for those who were doing well. Rapid alternation in the use of the wards was secured. The doors leading from the one to the other were locked, and the chinks filled with tow and pasted over with paper, so as to leave only an entrance from the open air. Doors leading to water-closets were provided with springs, and the water-closet windows were nailed open in such manner as to prevent their being closed. When empty, the wards were thoroughly fumigated with sulphur fumes. The windows were then left open day and night; the floors and furniture were scrubbed with soap and water and a solution of bichloride of mercury (1-to-1,000); the bed-clothes were changed, and fresh straw was put into the ticks. In all the wards large demijohns were placed, filled with the 1-to-1,000 bichloride solution, which was mixed with equal parts of water at different temperatures for use in washing the hands, making injections, etc. It was used hot or lukewarm, according to the indications. When the patient was brought to the delivery-room she was given a bath and an enema, and the genitals, the buttocks, and the thighs were washed carefully with a lukewarm solution of the bichloride, 1 to 2,000. At least two quarts were injected into the vagina by means of the fountain-syringe. The fountain-syringe consisted of a glass bucket, a long rubber tube, a straight glass tube for vaginal injections, and a curved one for intra-uterine injections when needed. The latter tube was perforated at the end, and there were eight perforations on the stem, near the extremity. In cases of tedious labor the vaginal injection was repeated every three hours. The rubber sheet covering the delivery-bed was washed with the antiseptic solution just before delivery. In order to limit the danger of infection by examination as much as possible, none of the nurses were allowed to make examinations except the one in charge of the waiting ward and the head nurse in the pavilion, and these were directed not to do so oftener than necessary to notify the doctors. The latter were requested not to introduce the finger into the womb, but to be satisfied with an abdominal examination and an examination of the part presenting at the os externum. At the beginning of a labor, doctors and nurses washed their hands in the solution. Besides, the hands were to be held in the solution a minute or more each time before the genital organs were touched. If the hands or instruments were to be introduced into the womb, glycerin was used, with the bichloride of mercury, 1 to 2,000. This was preferred to carbolic oil, as the glycerin itself possessed antiseptic properties, which were enhanced by the addition of the bichloride. When the head appeared at the vulva, a piece of lint soaked in the bichloride solution was applied, and kept there for the prevention of the entrance of contaminated air into the vagina. After the expulsion of the child the genitals were kept covered with a similar compress. The placenta was expressed, so as to avoid the introduction of the fingers into the vagina. In exceptional cases they had to be introduced, the vagina was afterward washed out with the antiseptic solution; otherwise not. On the same principle, intra-uterine injections were employed only when the hands or instruments were introduced into the womb, or after

the birth of a macerated child. He never allowed any part of the placenta or membranes to remain in the womb; the introduction of the entire hand into that organ gave rise to very little danger compared to that of hæmorrhage and septicæmia, which were liable to develop if any part of the afterbirth were left behind. In such cases the intra-uterine injection was given immediately after the removal of the secundines, from two to six quarts of a hot solution being employed. In case of symptoms arising during the lying-in period pointing to possible affection of the uterus, a speculum was inserted, a careful examination of the vagina and cervix was made, and, if called for, the uterine injection was given by passing the tube through the speculum, while immediately after delivery it was introduced between two fingers held in the cervical canal.

After the removal of the secundines the patient was washed with the antiseptic solution, and a piece of lint, six inches wide and eight long, folded lengthwise so as to be three inches wide, was placed over the vulva. Outside of that was placed a piece of oiled muslin, nine inches long and four inches wide; over that still came a large pad of oakum; and, finally, the whole was fastened to the binder by a piece of muslin eighteen inches square, folded together so as to form a kind of boat five inches wide, and pinned in front and behind at each of its corners. This dressing was renewed four times in the twenty-four hours. At the same time the genitals were washed with the bichloride solution. The floor of the ward was sprinkled four times a day with the undiluted solution. In order to prevent infection through visitors, the patient was not allowed to see any person while in the pavilion unless death was imminent, when a minister was admitted. The doctors and nurses were not allowed to go into the general wards or into the dead-house.

The instruments were put into a five-per-cent. solution of carbolic acid, the bichloride being injurious to metal. The patients sometimes complained of a little smarting from the bichloride, and in one case it seemed to produce a slight eruption, which was easily controlled by glycerin. In no case had there been any general symptoms attributable to the mercury. The dressings were continued so long as the patients were in the convalescent ward. They were usually discharged between the tenth and fifteenth days.

The result of the adoption of this plan of treatment had been wonderful. As by magic, all trouble had disappeared. Ninety-seven women had been delivered since its introduction, and not only had none died, but there had scarcely been any sickness among them. There had been no trace of diphtheritic inflammation, by which they used to be persecuted. Where they formerly had offensive odors, feverish and despairing patients, over-worked nurses, and despondent doctors, the air was now pure, the patients looked well, their temperature was normal, the nurses were cheerful, and the doctors happy.

Bichloride of mercury had certain advantages over carbolic acid: First, it was a much more reliable disinfectant; second, it was not only free from odor, but it was also an excellent deodorizer; third, it affected the skin of the nurse and accoucheur less; fourth, it was more economical.

In private practice he used the same treatment, substituting cotton for oakum, using a rubber fountain-syringe or Davidson's syringe, and changing the dressing only three times a day. For the intra-uterine injections he used a tin tube, especially in cases of abortion, in which it might be necessary to change the curve somewhat, adapting the instrument to each particular case.

Dr. R. A. MURRAY gave the statistics of the Maternity Hospital during his three months of service preceding that of Dr. Garrigues, and said that out of 96 patients delivered 14 died, 8 from conditions directly traceable to the lying-in chamber. The form of puerperal fever was similar to that present in Belle-

vue Hospital about ten years ago. It differed from puerperal fever as it was usually described in text-books. There was a good deal of puerperal diphtheria, usually commencing at the vulva and extending up the vagina. In only a very few cases had there been any evidence of its having reached the uterus. It was very seldom ushered in with marked symptoms. It commenced with a small and frequent pulse, and chill, but the temperature during the first few days seldom rose above 100° F. It then became intermittent, perhaps 101° in the morning and 102.5° in the evening, and there were occasional rigors. If the vulva were exposed (and it always was during twenty-four hours after confinement at intervals of about six hours), one could see a slight, almost imperceptible blush come over any lacerations that might be present; in from one to three days it would have assumed a grayish, ashy hue. Then typhoid symptoms developed. The treatment had consisted largely in the use of carbolic acid. He had applied it at the seat of the diphtheritic spots sufficiently strong to produce almost a caustic effect, but as soon as the slight slough separated the diphtheritic process became worse than before. He approved of the treatment advocated by the author of the paper, and thought it might be carried out in its details in hospital practice. In private practice it would be more difficult.

Dr. W. GILL WYLIE referred to a paper which he read before this society about six months ago (see the "New York Medical Journal" for June 23, 1883, p. 679), in which he advocated certain antiseptic methods in the lying-in chamber, and said that by observing them he had had only a single case in which there had been a rise of temperature after delivery, in which case the forceps had been used, labor having lasted about eighteen hours. The elevation of temperature was only slight. In 1871, while interne at Bellevue Hospital, he treated thirty-six lying-in women on principles directed against sepsis, and in not a single case did puerperal fever develop. He thought it important to secure free drainage of the womb, especially in delivery before term. If necessary, a drainage-tube should be introduced. He advocated antiseptic methods even in private practice, and carried out in detail.

Dr. W. R. GILLETTE had been connected for some years with the Maternity Hospital service, and said that there could be no question as to the importance of the suggestions mentioned by the author of the paper for the prevention of the rise and spread of puerperal fever in the Maternity Hospital. There might be some difference of opinion as to the methods to be adopted. The last antiseptic seemed to be bichloride of mercury, and, of course, as it was the most recent, we must bow to it, but he was not sure that it should supplant the others, which had stood the test of time, and given such excellent results. With regard to the dressing, he could perhaps see benefit in the external bandage, but he did not think the lint and the oakum could be retained in position in a manner to serve as a Lister dressing; as the patient moved about in bed, the dressing could not be kept closely in position so as to prevent the entrance of disease germs. He hoped the results obtained by Dr. Garrigues would continue, but he must, from an experience of years in the same institution, advise the doctor, while he was hopeful, not to be too sanguine, but to watch and pray. He referred to the great mortality existing among the puerperal patients at Bellevue Hospital just before their transfer to the Maternity Hospital some years ago. By simple cleanliness, without the use of bichloride of mercury or of Listerism, that mortality was then reduced almost to a minimum. He believed that in strict cleanliness lay the secret of success in the management of lying-in institutions.

Dr. A. S. HUNTER found himself quite in accord with the author of the paper regarding cleanliness and the use of anti-

septics. There was no question but that we were having better results in labor since having undertaken to disinfect and cleanse the parts more thoroughly than before. He believed, with Dr. Gillette, that it would be impossible to prevent the entrance of germs by means of the pad shown by Dr. Garrigues. He preferred the Lyman tube with which to make injections. He did not think it difficult to carry out the details of antiseptic in private practice.

Dr. S. BARUCH offered his unqualified condemnation of the practice of antiseptic injections after normal labor, and he was very glad indeed that Dr. Garrigues had not said anything at all in advocacy of that practice. He believed that the practice, which seemed to be becoming customary, must cease. He spoke of injections after normal labor only. Out of nine hundred cases of labor which he had attended during the past twenty years, among which there were many with complications, there had been but one death preceded by febrile symptoms, and he was not sure that in that instance it was due to a septic process. Since Dr. Wylie read his paper before the society, about six months ago, he had employed antiseptic injections rather extensively, using a three-per-cent. carbolic-acid solution, and his experience had been somewhat singular. The injections were made twice a day. He had seen six cases under this treatment in which fever, undoubtedly due to a septic process, had developed after the fifth day. Antiseptic prophylactic injections had been largely tried in Germany, and were being abandoned, as better results were obtained without them than with them. Dr. Baruch considered prophylactic injections as objectionable, because it was detrimental to disturb the patient after labor for any purpose; she should be kept as quiet as possible. It was impossible to introduce a syringe without disturbing the genital organs more or less. Very few nurses could make the injections properly. The injections might displace clots which had been formed to close vessels, or they might tear recent adhesions. Collapse and shock had been produced. These facts had been verified by clinical experience. In normal cases, he believed that simple cleanliness before, during, and after labor would accomplish everything necessary to carry the woman safely through childbed. He referred to the practice of introducing iodoform pencils into the uterus, made up of iodoform, starch, and glycerin, in cases of injury to the genital tract, and to be renewed when the lochia again became offensive. This practice had been attended with good results.

Dr. F. V. WHITE said that antiseptic vaginal injections were employed in Bellevue Hospital as long ago as 1856, when he was interne. With regard to pressing out the placenta, he had never been able to do it.

Dr. J. P. GARRISH had attended something like four thousand cases of midwifery, and had not had more than two cases of puerperal peritonitis. During the first thirty years of his practice he used no antiseptics whatever. He did not believe in meddlesome midwifery, and there was too much of it. In normal labor the physician who simply observed strict rules of cleanliness would have the best results. A change of the clothing, of the bed, sheets, and blankets, the use of clean towels, and the application of a clean napkin to the genitals after delivery, were all that was necessary, and, if we used prophylactic injections, we should simply be violating the laws of nature, and take the risk of opening the mouths of vessels, of injecting the fluid into the Fallopian tubes, and of doing a variety of injuries.

Dr. J. C. PETERS had been waiting since 1873 to see carbolic acid go out of use as a so-called antiseptic, and he believed that the time had now arrived. It should be supplanted by bichloride of mercury, which was really a good germicide.

Dr. GARRIGUES, closing the discussion, said Dr. Murray was more able than anybody else to appreciate the success obtained,

since he had had to combat the same evils. Undue stress ought not to be laid on the fact that he (Dr. Garrigues) had obtained a new ward, for this was only one out of three used for the service. Of the two others, one, the former delivery-room, had been looked upon as very suspicious by Dr. Murray himself, and in the other the worst kind of puerperal diseases had formerly occurred; but, since the new treatment had been instituted, the results were alike good in all the wards. Dr. Murray's remarks in regard to private practice had been sufficiently answered by Dr. Wylie. Dr. Garrigues was much surprised at Dr. Gillette's remarks, since he (Dr. Garrigues) had just given the statistics for the year 1875; he had taken them from Dr. Gillette's own report; and there had been, as stated in the paper, 570 mothers delivered, 15 of whom had died. This might have been a great progress as compared with the enormous mortality in Bellevue Hospital, but there was no comparison between that and the results now obtained. Dr. Hunter had said the dressing would become folded so that the air would have free access. As a matter of fact this was not so. The sizes indicated for the lint and the oiled muslin had been found by actual observation to be the best, and with them these two pieces of the dressing, which composed the true antiseptic part of it, were not folded. The lint lay entirely smooth, and the oiled muslin just touched the inside of the thighs, and here each edge was turned slightly forward. The oakum, on the contrary, was meant to adapt itself to the space found between the thighs so as to form a bulky mass there, and the muslin, being spread out by means of the pins fixing it to the binder, and being raised between the thighs by the underlying oakum, was likewise smooth and not folded, the width of the bandage where it was fastened to the binder being five inches. Lymian's silver tube would, like all metals, be corroded by the bichloride of mercury. If the terminal opening of the glass tube should happen to be clogged, there was one on the side, a quarter of an inch from the end, and in practice he and his assistants had found that it worked perfectly well. We ought to distinguish between intra-uterine and vaginal injections. The former constituted a delicate operation, which ought always to be performed by the accoucheur himself, and only on special indication. They were indicated when hands or instruments had been carried up into the interior of the womb, because, in spite of the antiseptic precautions used by the accoucheur, the risk of contaminated air being introduced along the hand, arm, or instrument was so great that it was much better to wash out the uterus than to run that risk. They were likewise indicated if the child had been dead for some time, and if the liquor annii was putrid. Vaginal injections were much less dangerous, and might be left to the nurse; but even they might give rise to infection, and he maintained that it was one of the chief advantages of his dressing that they became superfluous. The placenta was always expressed by Credé's method, which succeeded in all cases except in those rare ones when it was adherent, and its removal even by the hand in the uterus was difficult. In about three hundred cases composing his last two services this had only happened five times. Retained placenta had never occurred. Labor was a normal process, but it was not normal to give birth to a child in a hospital, consequently the artificial surroundings called for artificial means to prevent mischief. Cleanliness was good, but had proved insufficient, not only in the Maternity Hospital, but in the European lying-in asylums, in which the mortality had decreased immensely since the introduction of antiseptics.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

A STATED meeting was held December 13, 1883, Dr. J. H. MUSSER in the chair.

ENORMOUS HYPERTROPHY OF THE HEART (weight, forty-eight ounces).—Dr. CHARLES W. DULLES showed the specimen, and made the following remarks: The patient from whom this specimen was obtained was a young man, eighteen years of age, who came under my care in February, 1882, in an attack of muscular rheumatism, principally affecting the shoulders. I found at that time great oppression of breathing and a dilated and hypertrophied heart, with a harsh, strong mitral systolic murmur. His urine contained biliary coloring matter and a great excess of urates; there was no albumin nor sugar, and the chlorides and phosphates were very deficient. In the sediment, only amorphous urates were found. The treatment employed included the administration of infusion of digitalis, with iron and strychnine. At one time, believing it might mitigate the violent action which I attributed to the real hypertrophy, I gave him *veratrum viride*, but it did no good. I did, however, afford prompt and apparently substantial relief from some of the symptoms by the use of iodide of potassium in twenty-grain doses thrice daily. After using this for a week, I noted in my case-book: "Sleeps well; eats well; cough very slight; urine clear; *can not hear the old murmur* (perhaps barely); both heart-sounds audible and pretty clear; action of heart fair." (It had been very tumultuous.) After doing well for six weeks, the patient had a new attack of gastric uneasiness, dyspnoea, and more or less cyano-sis. On the night of May 10th I gave him a fifth of a grain of hydrochlorate of pilocarpine hypodermically (in the left arm), under the influence of which he sweated, but had no salivation. The next day he had a large oedematous swelling of the left side of his neck, below the jaw, reaching to the middle line in front. This increased up to the evening, and gradually subsided in three days. About this time fluid began to accumulate in the abdomen and thorax, and there was, of course, oedema of the feet and legs. There was now a most beautiful water-hammer pulse over the femoral arteries, below Poupart's ligament. The pulsation was intermittent, and had a reduplicated sound, like this: . — , . — , . — , . — , etc.

Three weeks later another severe attack occurred, and another about three weeks after this. There was now considerable albumin in the urine, together with hyaline tube-casts. When his attack came on, which was at night, I gave him one third of a grain of hydrochlorate of pilocarpine hypodermically, which produced free sweating and brought out about two fluid-ounces of saliva. His pulse came down from 140 to 100 in half an hour; but the dyspnoea abated only temporarily, the restlessness continued, the cyanosis increased, the respiration varied from 35 to 60 a minute, then the bowels moved involuntarily, his lungs seemed to fill up with oedema, and he died asphyxiated.

Autopsy, made the next day, with the assistance of Dr. Formad and Dr. J. H. Musser.—The points of interest were as follows: There was general oedema of the feet and legs. The face, neck, and chest were covered with purpura-like spots and patches. The abdomen contained about two quarts of clear serum, and each pleural cavity nearly as much. The lungs were normal, but small, and occupied the upper part of the chest. They were quite oedematous. The liver was slightly fatty. The spleen was of normal size, but very hard and tough. The kidneys were large, congenitally lobulated, and in a state of cyanotic hypertrophy. The heart was enormously hypertrophied, weighing, when all the adherent parts were removed, forty-eight ounces. The pericardium was so uniformly attached to it that it could not be removed, and there was absolutely no pericardial cavity. The right ventricle contained about six ounces of soft post-mortem clot. The left side contained about two ounces of like material. After the heart had been opened and well washed, it weighed forty ounces. All the valves and blood-vessels were healthy. The tricuspid and aortic valves were

quite competent; the mitral orifice was enormous, measuring two inches and a half across. Every part of the heart was hypertrophied, and to about the same degree. The whole organ, which I here show, was of about the size of a bullock's.

The points of interest in this case—apart from the curiousness of the specimen—seem to me to be: the comparative immunity of the kidneys, the absence of signs of adherent pericardium, the benefit derived from the use of iodide of potassium, the temporary disappearance of the very marked systolic and presystolic mitral murmur, and the parotid swelling following the hypodermic injection of pilocarpine into the arm of the same side.

The CHAIRMAN remembered the case distinctly, both before and after death. He had marked out on the chest the dimensions of the heart, and had made them out as enormous, extending especially to the right. Furthermore, he thought there was a double mitral murmur. The only apparent cause for the hypertrophy was the adherent pericardium. He would like to know what Dr. Henry thought of the correctness of this explanation.

Dr. F. P. HENRY said that the heart presented was remarkable, not only for its enormous size, but also for the absence of the usual causes of cardiac hypertrophy, there being neither valvular disease nor obstruction in any part of the circulation. During his student days he had seen some very large hearts in the collection which Professor Alonzo Clark was accustomed to show his class, but he would not trust his memory so far as to affirm that any one of them was as large as the one just shown.

Dr. MACCONNELL had seen a case, in a member of the Modjeska troupe, where post-mortem examination showed an enormously hypertrophied heart, with adherent pericardium and markedly granular kidneys. In that case the hypertrophy was clearly due to the kidney trouble.

Dr. FORMAN thought that the heart in Dr. Dulles's case was unique as to size. Dr. Robinson, of New York, had recently reported a case of hypertrophied heart weighing fifty-six ounces, but Dr. Dulles's specimen had been weighed after the removal of clots, etc.

The CHAIRMAN asked whether other members of the patient's family did not have hypertrophied hearts without valvular lesions. If such was the case, taking into consideration the age of the patient, it would be well to bear in mind the probability of the hypertrophy having been in part secondary to the pericardial adhesions and in part idiopathic in origin.

Dr. DULLES said that there was a tendency to hypertrophy of the heart in one sister, and that the murmur was double at times.

CALCIFIED PERICARDIUM; DOUBLE MITRAL DISEASE.—Ella S., white, aged twenty-three, was admitted into the University Hospital in September, 1880, complaining of palpitation and dyspnoea, and suffering from an œdematous and eczematous condition of the lower extremities. She was a girl of regular habits, somewhat exposed to changes of weather and to wet, doing no very hard work. She had had the diseases peculiar to childhood, but never rheumatism or chorea. Her father had had acute articular rheumatism, and died suddenly. Beyond this there was nothing peculiar in the family history. Three years before admission she first noticed slight palpitation and dyspnoea on exertion. For some time before that she had been subject to frequent attacks of epistaxis. One year afterward dropsy appeared in the ankles and spread upward. The palpitation and dyspnoea became more troublesome, her flesh and strength failed, and she was compelled to quit work and come into the hospital. When first seen, she was pale, anæmic, weak, and breathless on exertion. The heart's apex beat was in the sev-

enth intercostal space, one inch to the outer side of the nipple line; its action strong and heaving. Best heard over the apex beat, but transmitted feebly toward the base of the heart and well out into the axilla, was a loud, blowing systolic murmur. There was no pain in the heart or tenderness on pressure over it, nor had there ever been. Over the lungs were scattered moist râles, and the respiratory murmur was harsher on the left side than on the right. There was slight cough, with some mucous expectoration. The lower extremities were œdematous, and the abdominal cavity was about half filled with fluid. The liver was slightly enlarged. The urine was normal in quantity, and contained neither albumin nor casts. Under treatment, the urine became copious, the œdema gradually disappeared, and the heart's action became stronger and more regular. In a few days friction sounds appeared at the base of the right lung. Any slight exposure would bring on an attack of intense congestion of the lungs, with dyspnoea, that often threatened life; and with these attacks there was frequently congestion of the kidneys, with suppression of urine. Between the attacks the heart retained its power well, though it slowly dilated. At intervals she complained of dull pain in the hepatic region. The rough respiration noted at first over the left lung became more and more marked, till finally, over a small area just below the spine of the scapula, it had developed into bronchial breathing; friction sounds came and went, and there were always moist râles scattered through the lungs. The expectoration was mucous or, rarely, mucopurulent. Three months after she came under observation there was developed at the second right intercostal space, and carried out into the arteries of the neck, a systolic murmur differing in pitch and tone from the mitral systolic. About this time, too, she complained of pain in the heart whenever its action was excited. Fourteen months after she was first seen there was noticed, just to the inner side of the apex beat, and carried indistinctly toward the base, a harsh, short murmur, immediately preceding the systolic murmur, and separated from it by an exceedingly short but appreciable interval. This murmur was noted on several occasions afterward, but was much oftener absent than present. Its appearance and disappearance seemed to be attendant on no definite conditions. Soon after it was first noticed she had several attacks of epistaxis, and afterward occasional slight hæmorrhages from the lungs. She was discharged in March, 1882, and was admitted again last September. She had been gradually losing ground. Seven months before, she took cold, and the dropsy returned and persisted. When seen, the whole body was œdematous, and the abdomen was enormously distended. The apex beat was in the fifth interspace, in the mid-axillary line. The systolic murmurs were perhaps louder, but, beyond this, had not changed. Over an area between the left nipple and the sternum was heard a harsh, low-pitched, presystolic murmur; it was much more apparent than the former presystolic murmur, but had the same characters; its point of maximum intensity was just to the left of the sternum; it was constant. The respiratory murmur over the left lung was very much harsher than over the right. Below the spine of the scapula the breathing was sometimes blowing, with mucous râles. The expectoration was mainly frothy mucus. She died, three weeks after admission, in a fit of dyspnoea.

SPINDLE-CELLED SARCOMA OF THE LOWER JAW.—Dr. MACCONNELL also showed for Professor Pancoast a section of a large tumor of this sort. The patient was a man twenty-four years old. The growth had existed for about three years. The egg-shell crackle was readily elicited, the growth being of central origin. On section, it presented a whitish appearance, and was permeated by spiculae of bone.

C. B. NANCREDE, M. D., *Recorder.*

Reports on the Progress of Medicine.

SURGERY.

By CHARLES B. KELSEY, M. D.

(Concluded from page 702.)

THE TREATMENT OF THE SAC IN OPERATIONS FOR STRANGULATED HERNIA.—The different plans of treatment of the sac in celotomy are concisely pointed out by Mr. McGill (*"Brit. Med. Jour.,"* Sept. 15, 1883). There are two courses open to the operator. One is the old plan of letting it entirely alone which is described in the text-books. The other consists in fastening it up and thus sealing the peritoneal cavity. The extra-peritoneal operation can not as a rule be practiced, because of the prolonged duration of the strangulation, or inability to reduce the gut, or the presence of omentum requiring removal.

The author details four methods of fastening up the sac after the operation: 1. The sutures may be passed through both skin and sac, both being approximated at the same time; 2. The margins of the sac may be separated from the tissues external to it, and brought together by catgut, the skin being united by a second row of sutures; 3. The neck of the sac may be ligatured and the sac removed; 4. The neck of the sac may be ligatured and the sac left in position. The first plan is particularly adapted to cases in which the skin and sac are adherent and form one thin coat over the hernia, as in umbilical hernia. The second is adapted to cases in which the complete separation of the sac is impossible. The third the author believes to be the best, as it offers two great advantages: it effectually closes the abdominal cavity, and thus, to a certain extent, it serves to prevent a recurrence of the rupture. In other words, it diminishes the risk and improves the result of the operation. The separation of the sac is sometimes a tedious and sometimes a simple operation, and is more apt to be simple in femoral than in inguinal hernia. When separated, a stout No. 3 catgut ligature is applied, and the sac is removed with scissors. The fourth method the author has never seen tried, but believes it to be particularly adapted to cases of congenital hernia where the sac is the tunica vaginalis and plainly can not be removed. The author supports his conclusions by the statistics of twenty-seven operations which were more or less favorable.

A METHOD OF REDUCING DISLOCATIONS AT THE ELBOW.—Dr. J. E. Kelly (*"Dublin Jour. of Med. Sci.,"* July, 1883) recommends the following methods of reducing obstinate dislocations of the elbow joint: They are generally reduced without much difficulty, but the operator occasionally encounters an amount of resistance which demands the application of pulleys or the aid of assistants. In other instances, in which a complicating fracture is suspected or recognized, considerable force may be essential to the diagnosis or treatment, and it is expedient that, while perfectly under control, this power should be applied with great steadiness. Again, in long-standing dislocations accompanied by extreme rigidity and consequent loss of function, authority, with the object of permitting efficacious treatment by passive motion, sometimes sanctions the fracture of the olecranon process. In any of these contingencies the procedure which the author recommends permits of the necessary treatment in the most satisfactory manner.

The operator sits on the corner of a table, at the end of which the patient is placed upon a chair. The injured limb is drawn under the surgeon's proximal thigh, which rests, close to the joint, on the anterior surface of the humerus, while the olecranon is accurately placed on the anterior surface of the

lower third of the distal femur, and the proximal foot is hitched behind the other leg, which is flexed firmly against the frame of the table. In order to obtain the most favorable fulcrum, the surgeon fixes his proximal elbow against the antero-lateral aspect of his corresponding thigh, and, grasping the wrist of the patient with both his hands, reduction is effected by the simultaneous and co-operative action of the muscles of the arms, back, and thighs. Fixation and counter-extension are supplied by the powerful thighs of the operator, and coaptation is effected with great nicety by the backward pressure of the proximal femur against the anterior surface of the humerus, while the distal femur forces the olecranon forward.

In the lateral modifications of the posterior luxations the reduction is generally effected by the same manœuvre which is employed for the simple form of dislocation; but, should special coaptation be necessary, it is at the disposal of the operator, as, when aided by the powerful constraining pressure of the thighs, the proximal hand can supply sufficient traction and stability, while the other is unoccupied and in the most advantageous position to apply any additional manipulation, which may, if desirable, be afforded by an assistant. If the condition be such that the full extending force of both arms be required, the isolated rural surgeon can, with a little ingenuity, render himself independent of professional aid by fixing the bone of the arm or forearm, which is displaced inward, by a bandage passing around his own loins, and by making lateral traction on the bone or bones displaced outward, by another bandage attached to his foot, and passing over his knee as over a pulley.

The author also details a somewhat similar procedure for the reduction of anterior dislocations.

TREPHINING FOR DIFFUSE OSTEO-PERIOSTITIS.—Dr. Schwartz (*"Revue de chir.,"* No. 5, 1883) furnishes some interesting remarks on the trephining of bone in certain cases of diffuse osteo-periostitis in the adult. After detailing a case, he raises the following question: Given, rapid inflammation of the whole of a bone which has previously been the seat of osteitis; absence of the medullary canal as a consequence of the old inflammation which has definitely closed it; absolute powerlessness of the trephine under the conditions—what should be the course of the surgeon under such circumstances?

The two former propositions are not insisted upon. They are well-known facts of physiology and pathological anatomy. But the last two possess much greater real interest. It is certain that such a case as is described is peculiar. Not only did the inflammation seem to have invaded, from the very commencement, the entire length of the bone, but it was impossible to evacuate with the trephine the pus which formed, because it was not in what could properly be called a collection.

Assuredly trephining constitutes an excellent intervention when it permits the flow of pathological products and the washing out of the cavity, osseous or other, which contains it; but of what use is the opening of the bone when the pus is infiltrated, when for all its length it is, so to speak, converted into a sponge? The author affirms that, had he immediately applied the trephine to two parts at a certain distance from each other, and had observed the condition not only of the diaphysis but the epiphysis, he should not have hesitated to have at once amputated the thigh, and, perhaps, might have saved the patient. In view of this condition, he again asks: When, in a child or youth who has already shown the signs of a diffuse osteo-periostitis, there is produced a new inflammation, rapid and total, with grave general phenomena, and when, by the aid of the trephine early applied to two points simultaneously, purulent infiltration of the bone for a great extent has been recognized, is it not better immediately to perform amputation of the thigh than to rely upon trephining, even repeated, and upon consecutive

arthrotomy? The cases in which it might be possible to totally exsect the bone, as in the fibula, are excluded.

HÆMORRHAGE IN HIP-JOINT OPERATIONS.—Mr. Jordan Lloyd ("Lancet," May 26, 1883) describes a new and valuable method of controlling hæmorrhage in amputation at, or excision of, the hip joint, which we will give in his own words: "The limbs about to be operated upon should first be emptied of blood by elevation. This will occupy only a few moments, and may be executed during the administration of the anæsthetic. Elevation, combined with gentle friction toward the trunk, renders parts as exsanguineous as the at times undesirable Esmarch's roller. A strip of black India-rubber about two yards long is to be doubled and passed between the thighs, its center lying between the tuber ischii of the side to be operated on and the anus. A common calico thigh roller must next be laid lengthwise over the external iliac artery. The ends of the rubber are now to be firmly and steadily drawn in a direction upward and outward, one in front and one behind, to a point above the center of the iliac crest of the same side. They must be pulled tight enough to check pulsation in the femoral artery. The front part of the band passing across the compress occludes the external iliac and runs parallel to and above Poupart's ligament. The back half of the band runs across the great sacro-sciatic notch, and, by compressing the vessels passing through it, prevents bleeding from the branches of the internal iliac artery. The ends of the bandage thus tightened must be held by the hands of an assistant placed just above the center of the iliac crest, the back of the hand being against the surface of the patient's body. It is a good plan to pass the elastic over a slip of wood held in the palm of the hand, so as to diminish the pain attending the prolonged pressure of the rubber bandage. In this way an elastic tourniquet is made to encircle one of the innominate bones, checking the whole blood-supply of the lower extremity. The elastic bandage may be secured above the iliac crest, in the usual manner, with tapes, and may be prevented from slipping downward by being held with a common roller tied securely over the opposite shoulder. Experience shows, however, that no mechanical means answers so well as the hand of a trusty assistant. When the band is once properly adjusted, the assistant has only to take care that it does not slip away from the compress or over the tuber ischii. The former is prevented by securing pad and tourniquet together with a stout safety-pin, and the latter by keeping the securing hand well above the iliac crest, or even more safely by looping a tape beneath the elastic, near the tuber ischii, passing it behind the sacrum and having it held in that position. The solid rubber tourniquet may be used in place of this bandage. I prefer, however, the bandage. The soft parts are less damaged by reason of its greater breadth, and it is less likely to roll off the compress placed over the external iliac."

This ligature, being entirely above the limb, is out of the way of the surgeon in any operation about the joint. The great trochanter is entirely exposed, the hip being free upward as far as the iliac crest and inward to the perinæum. It has all the advantages of Davy's lever, and several in addition. 1. The simplicity and certainty of its application. 2. The certainty with which the vessels are controlled, regardless of the movements of the patient or manipulations of the operator. 3. The freedom from danger of injury to the rectum or abdominal contents. 4. Its applicability to cases where the rectal lever could not be employed, as in strictures of the bowel, intra-pelvic growths, and arterial abnormalities. 5. It requires no special apparatus.

With this method the author has done four almost bloodless amputations at the hip joint, and several minor operations.

SUPRAPUBIC LITHOTOMY.—Dr. Villeneuve ("Rev. de chir.,"

No. 9, 1883) discusses at considerable length the propriety of the substitution of the suprapubic for the different perineal operations as a general rule in cystotomy. He proposes to examine whether, with the antiseptic methods and the new perfection to which the suprapubic operation has been brought, it may not be practiced with advantage in all the cases for which the perineal operation is now done; in other words, in all cases not suitable for lithotripsy. He arrives at the following conclusions: 1. The suprapubic operation, which, up to the present time, has been an exceptional method, appears worthy to become the general rule of practice, though not the exclusive one. 2. It should be practiced with all the modern improvements: distension, injection of the bladder, forcing back of the peritoneal *cul-de-sac*, antiseptic precautions, etc. 3. The suture of the bladder should be avoided, but it remains, nevertheless, the ideal to pursue, which, if realized, would place by the immediate union the superiority of the suprapubic operation beyond all question. 4. The high operation is still, as in the past, a necessity in cases of large or encysted calculi, of intolerant bladder, and of impermeable or contracted urethra or vagina. 5. It is exceedingly probable that it will become the favorite operation, in old men and adults, in cases where lithotripsy is not applicable, and which are now treated by the perineal operations. 6. In male infants it may be presumed that it may prove at least equal to the perineal operations, but the happy results of the latter render its substitution in this class of patients less important. 7. With young girls, and girls at the age of puberty, the high operation will be the chosen one. 8. In married women the choice between the high and the vaginal operations remains undecided, and requires new study. 9. An inflammatory affection of the uterus, a notable deformity of the bladder through malposition of the uterus, and especially cystocele, should lead to a decision in favor of the high operation. 10. The hypogastric operation in adult females should be preceded by dilatation of the urethra. 11. The constitutional affections and diatheses furnish no special indications for the choice of operation. 12. The same applies to the lesions of one or other parts of the sympathetic plexus, which either operation may entail.

SURGICAL INTERFERENCE WITH TUMORS OF THE BLADDER.—Dr. Bazy ("Annales des maladies des organes génito-urinaires," September, October, 1883) arrives at the following conclusions respecting surgical interference with tumors of the bladder in the male:

1. Intravesical tumors in men, which, up to the present time in France, and up to a few years ago in other countries, have seemed beyond the resources of surgery, may be usefully treated and cured. 2. An operation may be done for malignant growths as well as for benign, for tumors pedunculated or sessile. 3. It is contra-indicated in cases of generalization, of adherence to neighboring organs, of diffuse neoplasms, and of serious changes in the kidney. 4. The basis upon which surgical intervention should rest is an exact diagnosis made by the aid of the rectal touch, joined with hypogastric palpation and exploratory catheterism of the bladder. 5. Direct digital exploration is not permissible except when the gravity of the symptoms demand operation, and intervention has been decided upon. This digital exploration may be made by the perineal method (*boutonnière*), or by the hypogastric. The latter, which does not seem to be more dangerous than the perineal, allows of permitting the completion of the operation, if it be deemed advisable. 6. The operation may be curative or palliative. 7. The former applies to pedunculated, whatever may be their nature, and to benign tumors, whether pedunculated or not. 8. The second, or palliative operation, is designed to combat certain symptoms which constitute the gravity of the affection—as hæmaturia, and especially the violent pains which accompany or follow

micturition, and the frequent desire to urinate. It consists, after the ablation of the tumor, in leaving a vesical fistula. It is thus the analogue of an artificial anus in cancer of the rectum. 9. The high operation should be preferred to the perineal, which, however, may suffice in certain cases. 10. The use of the rectal inflator of Peterson is almost indispensable for the high operation. 11. The median incision is not always sufficient, sometimes an L-shaped incision being necessary, and a curved one, forming an upper flap, being sometimes of advantage. 12. The tumor may be removed by the ligature: by torsion, if it be pedunculated; by detachment, by scraping, or by causing a loss of substance in the bladder. 13. This loss of substance may be total—that is, extend through all the coats of the bladder—or partial, involving only the mucous membrane and the internal muscular layer. 14. The total loss of substance appears to be necessary only in cases implicating the posterior wall of the bladder, or possibly the lateral walls. 15. The suture is indispensable in cases of total loss of substance, and is serviceable in cases of partial loss. 16. The fear of infiltration resulting from an operative wound of the bladder is not as real as has been supposed. 17. Every wound, united or not, contra-indicates occlusion of the bladder. The employment of the two siphon tubes, back to back, of MM. Périer et Guyon, appears to the author to realize the best conditions for the easy escape of urine.

CHYLOCELE OF THE TUNICA VAGINALIS.—Dr. W. M. Mastin ("Annals of Anat. and Surg.," May, 1883) contributes a very interesting article on this affection, which he believes to be less infrequent than the small number (five) of reported cases would indicate. These five cases, one of which is his own, he has carefully analyzed. He finds the cause of the affection to be a rupture of a lymphatic vessel and an extravasation of its contents into the tunica vaginalis, the lesion being the same as in the analogous affections chylouria, chylothorax, and chylous peritoneal dropsy.

He also finds that climate has a marked influence in this as in other lymphatic affections, four of the five cases having been residents of warm latitudes. In three of the cases the chylocele was preceded by blennorrhagia, and the author believes that in his own case the lymphangitis resulting from this cause was a direct exciting cause of the lymphatic engorgement, rupture, and extravasation.

In the author's case, and in that of C. H. Mastin, a lymph varix was found on the anterior aspect of the testicle at its junction with the cord, from which, after the opening of the sac, lymph could be seen to exude. In the former a single vessel was found opening at the most prominent point of a small tubercle, while in the latter the mouths of three or four distinct vessels were seen after the cutting off of the varix.

Regarding the diagnosis, the appearance of the tumor can not be distinguished from that of an hæmatocele, but a non-translucent tumor of moderate size, fluctuating, associated with enlarged inguinal glands or any lymphatic disorder, the patient, at the same time, presenting the history of one or more blennorrhagias, and especially of residence in a tropical climate, should form a combination of symptoms quite sufficient to awaken suspicion as to the nature of the malady.

The method of treatment by free incision into the sac and ligation of the exuding vessel is unhesitatingly recommended. By this procedure every portion of the cavity is exposed to view, and the oozing point can easily be seen and secured.

THE RADICAL CURE OF VARICOCELE.—Mr. R. L. Pinching ("Dublin Jour. of Med. Science," May, 1883), led by the success of the treatment of hæmorrhoids by injections, has been trying the same plan for the radical cure of varicocele. He has used liquor ferri chloridi with success in one case, but with such an

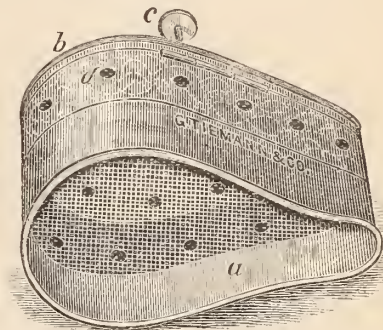
amount of pain as to cause syncope. In two other cases he has used strong tincture of iodine with equally good result and with less pain. He used in each case a syringeful of the solution, causing a considerable extravasation into the areolar tissue around the cord. All of the patients were able to attend to their business on the day following the operation, using simply a suspensory bandage.

New Inventions, etc.

AN IMPROVED INHALER.

By R. W. MITCHELL, M. D., MEMPHIS, TENN.

THE accompanying woodcut so clearly represents the instrument that an explanation of it is hardly necessary. This inhaler is made of tin. It is divided by a diaphragm of wire gauze into two nearly equal parts. The letter *a* shows the mouth-piece with the wire gauze inside, and openings for the admission of air. The cover *b*, opens by a



hinge on the side, and allows the introduction of cotton cloth or other material, which lies on the top of the wire diaphragm, and receives the ether.

There is a sliding button, *c*, which goes between the fingers, and facilitates the handling of the instrument. When not in use, this button slides in.

This inhaler has been fully tested, and is recommended to the profession on the grounds of:

1. Durability. 2. Cleanliness. 3. Cheapness. 4. Economy of ether, the amount being far less than that consumed by other inhalers.

It is manufactured by Messrs. George Tiemann & Co., New York.

Miscellany.

THERAPEUTICAL NOTES.—*Apomorphine in the Treatment of Hystero-epilepsy.*—In a recent number of the "Medical Times and Gazette" T. Hammond Williams, L. R. C. P., gives notes of two cases of hystero-epilepsy in which he made use of apomorphine. Mental perturbation, he states, was marked in both cases. In one of them, he thinks, it was evidently the result of the uterine function being in abeyance. In the same case the vaso-motor system also seemed to be at fault, for, on pricking the skin, no blood appeared from the cutaneous arterioles and capillaries. The general nutrition and the condition were normal. Ovarian compression and the use of hydrate of chloral having proved of no avail, hypodermic injections of apomorphine were employed, one fifteenth of a grain at each injection. The first two injections failed to provoke vomiting, their action being retarded, the author thinks, by the fact that the patient was still under the influence of chloral. Finally emesis took place, followed by prostration, drowsiness, and sleep. "The drug," says the author, "no doubt produced

emesis by being carried into the circulation to the great nervous center in the medulla oblongata, where, by its action, it excited vomiting, besides causing nausea and depression of the circulatory system, and diminishing the muscular and nervous power. It therefore acts as a direct emetic upon the so-called vomiting center, but as an indirect emetic in relation to the stomach."

Kairine as an Antipyretic.—Dr. Henry Ashby, of Manchester, in a short communication to the "British Medical Journal," testifies to the decided and certain reduction of temperature accomplished by the employment of this medicine, and adds that it has the advantage over quinine of not producing headache, singing in the ears, or other unpleasant effects, although the impure drug employed at first was not altogether free from these objectionable properties. As the antipyretic effect is of brief duration, it is better, he thinks, to give small doses frequently repeated. To avoid its unpleasant taste, it may be given in gelatin capsules. He thinks that its effect is limited to reducing the temperature, and that therefore it acts only as a palliative, being wholly inadequate to cut short the course of any of the specific fevers. Using the pure drug, he considers it safe, even in large doses, [inasmuch as Dr. Ashby begins by giving some information in regard to the chemistry of the drug, and expressly states that it is an artificial *alkaloid* (oxycholinomethylhydrate = $C_{10}H_{13}NO$), it is not a little singular that he falls into the common error of spelling its name without the final *e*—a termination which should be given to the names of all alkaloids.]

THE FRENCH CHOLERA COMMISSION.—The report of the three surviving members of the Pasteur Mission is still unpublished. It is stated that it will be very elaborate, and will be presented to the Minister of Agriculture, whose department includes questions of public health. Meanwhile, M. Pasteur has been interviewed, and it appears that he is at once pleased and disappointed with the results of the expedition. He is disappointed because M. Thuillier and his colleagues were not able to inoculate any animals with the cholera germ, apparently because they did not succeed in discovering it; but he draws consolation from the fact that the German inoculation-experiments were also without result. Indeed, M. Pasteur almost despairs of final success until he can find some man of sufficient public spirit to deliver himself over as a subject for experiments of this kind. Meanwhile, the mission has done much useful work, and has limited the field for future inquiries. —*Med. Times and Gaz.*

A CURIOUS MALPOSITION OF A TOOTH.—In a recent number of the "Lancet," Dr. Gopaul Chunder Roy relates the case of a Hindu lad, aged fourteen years, who presented himself for treatment at the Soree Charitable Dispensary, for what he considered to be a tumor growing within the nasal cavity. He noticed a foul smell in his breath about four months before, attended with catarrh and sometimes a bloody discharge from the left nostril. For the previous two months the growth had been observed to occupy the left cavity, where it seemed to be attached to its wall at its upper part, its free end was looking downward in the shape of a truncated cone. Arrangements having been made for plugging the posterior nares, in the event of uncontrollable hæmorrhage, the tumor was seized with dressing forceps and extracted. It proved to be a tooth of the shape of a canine. There was very little bleeding after extraction, and this was stopped by alum lotion. The free extremity was covered by enamel, which stopped short at its junction with the root. The root was deeply embedded in the side and upper part of the antrum. The boy had got his set of permanent teeth, with the incisors and canines entire on either side. There was no deformity of the jaw and no swelling or cystic formation. It was clearly a case of extra-follicular development and eruption of a tooth in a wrong place, the peculiarity being that while in reported cases of like nature the crown of the tooth shows itself at the floor of the nasal cavity from below upward, in the present instance, by some freak of nature, the dental follicle was transposed, and the eruption was from above downward. The tooth has been sent to the Royal College of Surgeons' Museum.

BONE-CHANGES IN RICKETS.—Dr. J. S. Bury read a paper on this subject before the Microscopical Section of the Manchester Medical So-

ciety ("British Medical Journal," Nov. 10, 1883), and illustrated his remarks by numerous specimens, sections, and drawings. After a brief sketch of normal ossification, which included the description given recently by Kassowitz of "metaplastic ossification," Dr. Bury described the chief variations met with in a growing rickety bone. Briefly, these were as follows. In moderate rickets, the columnar zone of the cartilage was lengthened and widened, owing to an increased growth of the cells; in more advanced cases, the rapidly growing and soft cellular columns, being compressed between the firm cartilage above and the bone below, also became arched, and thus the epiphyseal swelling was greatest at the middle. There was an increased formation and enlargement of the vascular canals in the lower zones of the cartilage; these latter were surrounded by borders of ossified cartilage, and they contained osteoid tissue and large vessels. The calcification of the cartilage took place very irregularly, and in extreme rickets was almost completely absent. The "medullary spaces" also presented an irregular character; they advanced to different heights, and burrowed into the cartilage in all directions. Ossification of cartilage went on here and there between and around the medullary spaces, which low down might be seen lined with lamellæ of bone. The medullary spaces often attained great size; in parts, their bony septa might disappear, inasmuch as, at the same time that new bony layers were being deposited, the architecture of the bone became completely altered. With regard to defective calcification, Kassowitz's view—viz., that both in rickets and in osteomalacia the limeless parts were new formations laid down in the place of absorbed calcified bone, and were never due to decalcification—was discussed and illustrated. The immature periosteal deposits were next referred to. Dr. Bury next related the particulars of a case of infantile osteomalacia, and exhibited some of the bones. These were very soft, and filled with red pulpy material. They presented no epiphyseal enlargements. Lastly, the nature of rickets and its pathological affinities were briefly considered. Dr. Bury regarded mere hyperplasia as the main pathological feature, deeming it inexpedient to class it as an inflammatory condition, on the ground of insufficient evidence.

THE ANATOMY OF HÆMORRHOIDS.—At a recent meeting of the Pathological Society of London ("British Medical Journal") Mr. Roedel said that there were two views with regard to the structure of hæmorrhoids; according to the one they were varices, according to the other they were vascular growths (angiomata). He had examined about thirty specimens; as a rule a pile consisted of a layer of mucous membrane inclosing some submucous tissue in which lay enlarged veins with thickened walls; in one specimen only did arteries contribute in any sensible degree to the bulk of the pile, and in one case also the pile contained some muscular tissue. The epithelium on a pile ceased, at a certain point, to be columnar, and became squamous; the transition was not gradual, but quite sudden.

SUBCUTANEOUS INOCULATION FOR SHEEP-POX.—A communication on this subject from M. Peuch, of Toulouse, has been submitted to the French Academy of Medicine ("Lyon médical," Nov. 11, 1883). It gives an account of recent experiments with sheep-pox virus which had been reduced in strength by the combined agencies of dilution and the lapse of time. Seventy sheep were inoculated, the dilutions used being the 1-60, the 1-100, and the 1-160. The following facts were established: 1, That the immediate effects of the inoculation were less strongly marked when the virus used had been kept for several months than when it was injected in a fresh state; 2, that, for this particular purpose ("clavelization"), the hypodermic needle was preferable to the lancet, since, by the employment of the former, a perfect pustule might be obtained—unaccompanied by a general eruption—even from a very small quantity of matter eight or nine months old, which, if inserted in the ordinary way, would give rise to no symptoms whatever.

MASKED EPILEPSY.—A treatise on this complaint, by E. Hjertstrom, is reviewed in the "Nordiskt medicinskt Arkiv," vol. xv, No. 8. The author defines masked epilepsy as a form of acute relapsing mania—or of mania becoming chronic through relapses—without convulsive seizures, but to which an epileptic character is imparted by the symptoms which invariably accompany it. His principal object is to offer an ex-

planation of the disease from an anatomical and physiological standpoint. Basing his conclusions upon Nothnagel's investigations into the nature of epilepsy in general, and the opinions of Meynert and others concerning masked epilepsy, Hjertstrom assigns as the cause of the psychical phenomena in the latter, spasm of the nutritive vessels of the cortical layers, produced by an irritation of the vaso-motor center. All the symptoms can be explained by the pathological condition of the cerebral vessels during the paroxysm—but particularly the loss of consciousness, or amnesia, which is more complete in proportion to the severity of the spasm. The alternation of psychical symptoms and convulsions is regarded, in accordance with Nothnagel's theory, as due to the co-ordinate and yet independent relation subsisting between the vaso-motor and the convulsive centers, the minimum of irritability at the latter point being considered to exceed the minimum of irritability at the former.

THE RELATIVE EXCITABILITY OF THE SUPERFICIAL AND THE DEEP-SEATED PORTIONS OF THE BRAIN.—The older anatomists held that the interior of the brain responded readily to the action of irritants, but that its surface was insensitive. Later investigations have shown this conclusion to be only partially correct, and that, at least in certain species of animals, portions of the cortical region are more or less sensitive. According to M. Franck and M. Pitié, the superficial cerebral layers are decidedly the most excitable. They found that electrical stimulation of the subcortical portions did not give rise to spasms. M. Cauty, however ("Gazette hebdom. de médecine et de chirurgie," Nov. 9, 1883), recently instituted a new series of experiments upon dogs and monkeys, the results of which tend to establish that the application of electricity produces precisely similar effects upon the white substance of the brain and upon its cortex; but that, conformably to the ancient idea, the sensibility of the white substance increases in proportion to its distance from the surface; or, more strictly speaking, in proportion as it approaches the occipital protuberance and the medulla oblongata—those real centers for the reception and diffusion of all cerebral impressions.

AUTO-INFECTION.—It has been shown by Senator, in a paper on this obscure but interesting subject, read before the Berlin Medical Society ("Gaz. hebdom. de méd. et de chir.," Nov. 9, 1883), that the system may become diseased through abnormal decomposition of digestive products within the intestinal tract ("autochthonic" or "autogenetic" infection), and that like processes may also take place in other organs, as, for instance, in the kidneys. Even the blood itself may furnish poisonous alkaloids, of which little is known excepting by their effects. The nervous and the urinary apparatus are chiefly liable to be deranged by these influences. One of the most remarkable phenomena to which they give rise is the condition denominated by Senator *dyseratic coma*. This he describes as identical in all its features with the *diabetic coma* of Kussmaul. He has met with it in two cases of chronic cystitis, with ammoniacal urine (in one of which the patient exhaled an unmistakable odor or trimethylamine), in two cases of cancer of the stomach, and in three cases of pernicious anæmia. In none of these could the presence of acetone be detected in the urine.

Dr. Litten remarked that cases of autochthonic poisoning were much more frequent than was generally supposed. He himself had observed its effects in certain gastro-intestinal disorders—some time ago in a young girl laboring under scarlatina, and more recently in three adults. The patients lay as if dead-drunk; could not be aroused to answer questions, but fell back and went to sleep immediately. The urine in every instance responded to the tests for acetone. As this condition was always preceded by symptoms of dyspepsia, it might be denominated *coma dyspepticum*. He had no doubt it was due to an actual poisoning by some unknown agent, perhaps an alkaloid, which was generated within the digestive canal in the majority of cases.

THE DIFFERENTIAL DIAGNOSIS OF TIC DOULOUREUX AND DENTAL NEURALGIA.—Magitot, of Paris, some time ago expressed the opinion that these two varieties of prosopalgia were clearly distinguishable by their symptoms alone. Tic douloureux he would define as an affection of the cutaneous branches of the trigeminus, occurring in paroxysms of an intermittent and spasmodic character which are provoked by the

slightest contact or movement; while neuralgia originating in the teeth is always increased or diminished by forces acting upon the oral cavity, such as the pressure of foreign bodies, atmospheric air, heat, cold, certain drugs, etc., none of which exert any influence in the case of tic. This view is controverted by Dr. Th. Walzberg, in the "Centralblatt für Chirurgie," November 10, 1883. He maintains that there is nothing specially characteristic in the symptoms of either complaint, and proposes to divide the facial neuralgias into two classes, viz.: those whose causes can, and those whose causes can not, be determined—the latter answering to the tic douloureux of Magitot. He adduces in confirmation three cases of prosopalgia successfully treated by himself. Concerning the first two of these he observes that they exhibit almost precisely the same assemblage of symptoms, yet that one of them certainly did not originate in the teeth, although presenting all the features characteristic of dental neuralgia, according to the French author. The third case, the symptoms of which would place it in Magitot's first class (tic douloureux)—and which also strongly resembled an intermittent disease—shows that a neuralgia may arise from the teeth, although entirely uninfluenced by agencies affecting the interior of the mouth. Symptoms in these complaints may facilitate the discovery of their causes, and so guide us to a successful plan of treatment, but only the most accurate objective examination in every case will protect effectually against error. It is better to search in vain for a tooth-root, upon the slightest suspicion, than uselessly to divide a nerve. A remark is appended relating to the mode of performing this operation. When it is designed to follow up to any considerable extent the ramifications of the infraorbital nerve upon the cheek, it is better to make the entering (semicircular) incision at a point somewhat below the orbital wall; otherwise a pouch will be formed too small for separate drainage, but large enough to act as a reservoir for the secretions, with the result of setting up a suppuration which will much prolong the process of healing. The latter, under favorable circumstances, should not occupy over five days.

AN ELECTRIC LAMP FOR SURGICAL PURPOSES.—Mr. E. Cresswell Baber ("British Medical Journal," November 10, 1883) describes a new illuminating apparatus (the *photophore électrique frontal*) invented by MM. Hélot and Trouvé. It has already been mentioned briefly in this journal. It consists of a small incandescent lamp of eight to ten candle power, inclosed in a metallic cylinder which is closed at one end by a concave glass reflector, and at the other by a bull's-eye lens. The distance of the latter from the glass globe can be regulated at will, or it can be entirely removed if necessary. The whole lamp is attached, by means of a ball-and-socket joint, to a curved plate fixed to the observer's forehead by means of a head-band, in the usual way. If desired, the lamp can be made into a stationary one by screwing it off the head-band and attaching it to a rod which is fixed into the top of a small leather case into which the whole apparatus packs. The lamp is worked by a battery consisting of four to six large cells, each containing one plate of zinc and two of carbon, immersed in a strong solution of sulphuric acid and bichromate of potash. The six cells are arranged in a row, and the plates are suspended by chains to an axle, by the rotation of which they can be raised or lowered, being retained in any position by means of a catch. When not in use, they are, of course, raised quite out of the liquid. According to M. Hélot, the battery lasts without recharging for eight or ten weeks, if used for several patients daily. The case of the battery measures $6\frac{1}{2} \times 3\frac{1}{2} \times 17$ inches, thus taking up very little space in the consulting-room. It has the advantage of giving off no smell; and, being inclosed, merely appears as a stained wooden case of the size described standing on the floor by the side of the patient's chair.

Comparing this light with that of an Argand gas flame, fitted with a bull's-eye condenser, it appears whiter and more powerful. This lamp gives an admirable light for laryngoscopy and posterior rhinoscopy, also for examination of the anterior nares and of the ear. A great advantage which it possesses over light thrown in by means of a reflector attached to the forehead is, that the beam of light of itself follows each movement of the observer's head. It has the further advantages of being ready for use at a moment's notice at any time, and of presenting a very steady, even light. Its chief disadvantage consists in

the observer's eye not being exactly in the axis of light, as in the case of the perforated head-mirror. This is only noticeable in examination of the anterior nares and of the ear, but can, to a great extent, be overcome by a little practice. The lamp will also doubtless be of use for gynecological operations or examinations, as well as for operations on deep-seated parts.

COMPULSORY MEDICAL EXAMINATIONS.—It is a frequent occurrence, in suits for injuries to the person, to have the plaintiff exhibit in court the limb which has suffered through the negligence of the party from whom damages are claimed, and very often such an exhibit proves a potent argument with the jury for a large verdict. It is a very different matter, however, for a defendant to come before the Court and ask for an order directing the plaintiff to submit to an examination to show whether the injuries are not altogether feigned, or are not the result, to a large extent, of some disease unconnected with the accident. Such a method of procedure, if rigorously carried out, might prevent a jury from rendering a verdict disproportionate to the real injury suffered; but the danger of unpleasant and perhaps immodest examinations in case of a female plaintiff has recently led a court in this State to decide that it is not proper to issue an order obliging the plaintiff to submit to such an examination. In that case, where a lady sued the Ogdensburgh and Lake Champlain Railroad Co., the defense was that the apparent injury came largely from a disease, which statement might be proved by an examination.

The order was granted in the first instance, but was reversed on appeal, the Court holding as follows: "There may be danger that, in actions of this nature, that plaintiffs will exaggerate the injuries they have received; and that defendants may be at a disadvantage in ascertaining the exact truth. But this evil is far less than the adoption of a system of bodily and perhaps immodest examinations, which might deter many, especially women, from ever commencing actions, however great the injuries they had sustained."

SULPHODINITROBENZOL AS A TEST FOR BILIRUBIN.—Professor Ehrlich ("Centralblatt für klinische Medizin," Nov. 10, 1883) has ascertained that when a solution of bilirubin in chloroform is combined with a proper amount of sulphodinitrobenzol containing to the litre 1 c. c. of sulphanic acid, 15 c. c. of hydrochloric acid, and 0.1 c. c. of nitrate of sodium, and sufficient alcohol is added to make the fluid homogeneous, the color of the latter will change in about one minute to red, of a darker or lighter shade according to the proportion of bilirubin. If, in the next place, concentrated hydrochloric acid be gradually dropped into the mixture, the color will turn first to violet, next to bluish violet, and finally to a pure, deep, and splendid blue. The liquid now contains a pigment which will impart a variety of tints according to the chemical reaction of the menstruum with which it is united. A strongly acid fluid will be colored a pale blue, a strongly alkaline one greenish blue, while a feebly acid, a feebly alkaline, or a neutral solution will appear red. In like manner, if a potash-alkali be poured carefully into the blue (acid) solution, three colors will be produced—i. e., a band of greenish-blue below, one of pure blue above, and a narrow ring of red between them. The same pigments were easily obtained from specimens of urine strongly charged with biliary coloring matter, and imparted the same characteristic tints to the variously reacting fluids. These results prove sulphodinitrobenzol to be the special test for bilirubin, since the phenomena described could not be obtained in connection with any other of the biliary coloring matters. Gmelin's process, on the other hand, constitutes a test for these matters collectively, as it brings out the characteristic colored rings with all of them, though more particularly with bilirubin. It follows that, when we wish to demonstrate the presence or absence of the biliary pigments in general, we should have recourse to Gmelin's test in the first place, as the most comprehensive, but that Ehrlich's is preferable when bilirubin alone is sought for. The two processes, however, do not exclude, but supplement each other, and their combined employment may be expected to yield interesting results. In applying his test, the author recommends that the urine be first mixed with an equal volume of dilute acetic acid, and the sulphodinitrobenzol then added drop by drop. If the fluid darkens, the further addition of an acid will call forth the violet hue characteristic of bilirubin.

THE ORIGIN OF "SPONTANEOUS" GANGRENE.—At the annual meeting of the French Association for the Advancement of Science ("Revue de chirurgie," Nov., 1883) M. Cerné reported the case of a man, sixty years of age, who had several gangrenous sores, with emaciation, polyuria, itching of the skin, etc. His urine was neither saccharine nor albuminous, but contained a large amount of phosphoric acid. He recovered slowly under treatment, and the phosphates at the same time diminished in his urine. This instance of phosphatic diabetes, which perhaps had been preceded by genuine diabetes, showed that the absence of sugar in the urine was not necessarily inconsistent, in such cases, with the existence of constitutional disease; and further observation would doubtless result in demonstrating a close relationship among the various affections of this class. M. Verneuil remarked that M. Cerné's case tended to confirm an opinion which he himself had long entertained, viz.: that all cases of so-called spontaneous gangrene—that is, such as had not evidently originated in severe injuries—were due to an internal cause, sometimes difficult to find, but which was always discoverable by a thorough and persevering examination of the patient. It was especially difficult to detect these organic changes in the urine, because here they were so transient. The sugar appeared and disappeared under various influences, such as change of diet, taking cold, traumatism, and anthrax. The rule with such patients was, once diabetic always diabetic, even if their urine showed no sugar; just as gouty subjects were always gouty, even when free from paroxysms of their complaint. But let one of the above-mentioned causes come into play, and the sugar would again make its appearance. It was through ignorance upon this point that anthrax had been supposed to be caused by diabetes, whereas it would be more correct to say that the reverse was the case.

ARMY INTELLIGENCE.—*Official List of Changes of Officers serving in the Medical Department of the United States Army from December 8, 1883, to December 22, 1883.*—McKEE, J. C., Major and Surgeon. Assigned to duty as Medical Director, Department of the Columbia. G. O. 31, Department of the Columbia, December 3, 1883. — SHUFFELDT, ROBERT W., Captain and Assistant Surgeon. Now on sick leave, relieved from duty in the Department of the East, and assigned to temporary duty in the office of the Surgeon-General of the Army. S. O. 284, par. 12, A. G. O., December 12, 1883. — CAMPBELL, JOHN, Lieutenant-Colonel and Surgeon. Having completed the duties pertaining to the office of the Medical Director of the late Department of the South, to proceed from Newport Barracks, Ky., to New York city, and assume the duties of attending surgeon in that city. Par. 12, S. O. 284, A. G. O., December 12, 1883. — CLEMENTS, BENNETT A., Major and Surgeon. Relieved from duty as attending surgeon, New York city, and detailed as member of Army Medical Examining Board, now in session in New York city. Par. 12, S. O. 284, A. G. O., December 12, 1883. — WILLIAMS, JOHN W., Major and Surgeon. Leave of absence on surgeon's certificate of disability granted in S. O. 157, November 12, 1883, Department of the Columbia, extended five months on surgeon's certificate of disability. Par. 6, S. O. 286, A. G. O., December 14, 1883.

NAVAL INTELLIGENCE.—*Official List of Changes in the Medical Corps of the Navy during week ending December 22, 1883.*—PASSED ASSISTANT SURGEON F. C. DALE, detached from the Coast Survey steamer McArthur, and ordered to the United States steamship Adams at Sitka, Alaska. — ASSISTANT SURGEON L. W. CURTIS, detached from the Adams and ordered to the Coast Survey steamer McArthur. — SURGEON J. W. ROSS, detached from the United States steamer Iroquois and ordered to the United States steamship Onward at Callao, Peru. — PASSED ASSISTANT SURGEON C. T. HIBBERT, detached from the Onward and ordered home.

SOCIETY MEETINGS FOR THE COMING WEEK.—*Tuesday, January 1st:* New York Neurological Society; Elmira (N. Y.) Academy of Medicine; Buffalo Medical Association; Ogdensburgh Medical Association; Croton Medical and Surgical Union (Katonah, N. Y.); Medical Societies of the Counties of Broome and Niagara, N. Y., and Hudson and Union, N. J. *Wednesday, January 2d:* New York Medico-Legal Society; Medical Society of the County of Richmond, N. Y. *Thursday, January 3d:* New York Academy of Medicine (annual election); Society of Physicians of the Village of Canandaigua, N. Y.

INDEX TO VOLUME XXXVIII.

	PAGE		PAGE		PAGE
Abbe, R. Observations on Hydrocele, founded on an Analysis of One Hundred and Fifty Cases.	482	Angiomata of the Orbit, Two New Cases of Cav- ernous, with Remarks	52	Bequests to Hospitals and the Delirium of Perse- cution	183
Abdominal Tumor	416	Animal Matter, Decomposed, in the Water used for Drinking and Domestic Purposes for fully two Weeks or longer, without any Deleterious Effects, by a Garrison of at least Eighty Souls.	454	Bigelow, Dr. Henry J., of Boston	15
Abdominal Tumor, A Rare Form of: Three Cases.	329	Ankylosis of the Knee in a Flexed Position; Reces- tion; Wiring of the Bones together in a Straight Position; Gangrene of the Leg and Foot; Amputation of the Thigh; Death.	639	Billings, Frank S. Trichiniasis in its Relation to Public Health and National Economy	116, 235
Abortion, Active Interference In	134	"Annales des maladies des organes g��nit-ur- inaires." The	213	Billings, F. S. A Case of Masculine False Herma- phroditism in a Child	315
Abortion, Criminal, An Alleged Case of	13	Anteflexion accompanied by Sterility	58	Billings, F. S. A Singular Case of Congenital Mis- placements in a Dog	490
Abortion-mongers under Arrest	15	Antimony in Skin Diseases	676	Billings, F. S. On the So called Equine Scarletina.	514
Abortifacient, A Brooklyn	241	Antipyretic Agents, Some Critical Remarks in re- gard to the Use of, in Typhoid Fever	574	Birmore, W. H. Some Notes on Comparative Pathology. Cancer in Domesticated Animals.	659
Abortifacient, An Alleged	72	Antisepsies and House Surgeons	704	Birth Returns, The, of New York	579
Abortifacient, An English	193	Anti-vivisection Bigotry in Paris, An Outbreak of Aorta, Atheroma of the, and the Arteries of the Brain	416	Bismuth, Subnitrate of, as a Dressing in Opera- tions for Clotrical Contraction	522
Abortifacient, Conviction of an	497	Aortic Opening, Congenital Obliteration of the	110	Bladder, Hypertrophy of the	690
Abortifacient, The Philadelphia	15	Aortic Orifice, Ossification at the	162	Bladder, Observations on the, during the Early Puerperium	561
Abscess, Chronic, of the Pelvis, Remarks on	359	Apartments-Houses, High	692	Bladder, Surgical Interference with Tumors of the	726
Abscess, Mammary, The Prevention of	591	Aphthous Stomatitis	602	Bleenorraghia, Localized, in the Female	250
Abscess of the Cerebellum; Sudden Death	248	Apomorphine in the Treatment of Hystero-Epi- lepsy	727	Blepharoplasty according to the English Method	103
Abscess of the First and Second Dorsal Vertebrae, Death with Cyanosis	500	Apothecary, A Dishonest, punished	366	Blepharoplasty by Transplantation of Skin from the Arm	132
Abscess of the Frontal Sinus; Cure	52	Apparatus, A New Spray	338	Blepharoptosis, Congenital, The Operation for	22
Abscesses of the Neck which may cause Sudden Death	452	"Archives of Laryngology." The	719	Blindness following Facial Erysipelas	417
Academy of Medicine, The	356, 467, 522	"Archives of Medicine." The	719	Blindness, Night, from Miasmatic Influences	533
Academy of Medicine, The American	340, 3-4, 411	Arm Presentation; Podalic Version	5-53	Bodgett, Albert N. Dislocation of the Sternal End of the Clavicle, with Dislocation of the First and Second Costal Cartilages. Also a Case of Dislocation of the Cartilages of the Fourth, Fifth, and Sixth Ribs	34, 62
Academy of Medicine, The French	693	Army Intelligence, 28, 56, 84, 112, 140, 168, 196, 224, 252, 312, 340, 368, 396, 424, 452, 480, 508, 536, 564, 592, 620, 648, 676, 700	592, 620, 648, 676, 700	Blood, Eight Ounces of	41
Academy of Medicine, The President of the, An Un- founded Imputation on	438	Arsenic and Iron in Anemia and Chlorosis	251	Blood-Poisoning, Russian Vapor-Baths a Cure for	601
Academy of Medicine, The Proposed Amendments to the Constitution and By-laws of the	384, 413	Arterial Lesions in Varicose Ulcers	592	Bloody Operations, Three Cases of Extensive, on the Face	426
Academy of Medicine, The Baltimore	465	Arteries, The Anastomosis of the Coronary	26	Board of Health, The State, Annual Meeting of, of West Virginia	80
Academy of Medicine, The, in Ireland	520	Arteries, The Common and the External Carotid and the Superior Thyroid Ligature of the, Aneurysm of the Internal Carotid	428	Board of Health, The Summer Tenement-house Service of the	40
Academy of Medicine, The New York	440, 470, 526, 605, 666, 667	Arthritis Deformans, Progressive, The Neurotic Origin of	557	Body-snatching in Pennsylvania	45
Academy, the Paris, The Cholera Debate at	181	Asphyxia from Food entering the Larynx during Etherization; Tracheotomy	448	Boue-Changes in Kieckers	728
Academy of Sciences, The French	609	Association, An, for Diseases of the Respiratory Organs and Climatology	225	BOOK NOTICES:	
Acne: its Etiology, Diagnosis, and Treatment	227	Association, American Public Health	616	Agnew, D. H. The Principles and Practice of Surgery, being a Treatise on Surgical Diseases and Injuries	460
Acne, The Treatment of	269	Association, The American Climatological	412	Anderson, J. W. Lectures on Medical Nursing, delivered in the Royal Infirmary, Glasgow	407
Acne, Simplex and Rosacea, The Local Treatment of	340	Association, The American Dermatological	266	Ashurst, John, Jr. The International Ency- clopedia of Surgery	175
Aconite, Preparations of	223	Association, The American National, of the Red Cross	128, 157	Eartholow, R. A Practical Treatise on Materia Medica and Therapeutics	578
Acorns	592	Association, The Hospital Saturday and Sunday	5-1, 719	Eeck, G. Therapeutischer Almanach	313
Acoustic Nerve, the Galvanic Irritation of	619	Association, The New Jersey Sanitary	608	Biddle, J. B. Materia Medica for Physicians and Students	819
Acoustic Nerve, Results of the Division of the, with a Discussion of the Significance of the Semicir- cular Bands for the Bodily Equilibrium	53	Association, The Physicians' Mutual Aid	383	Bourneville et Bricon. Manuel des injections sous-cutan��es	67
Adenoid Vegetations of the Pharyngeal Vault, and their Relation to Middle-ear Disease	358	Asthenopia, Neurasthenic, and so-called An��sthe- sia Retinae	53, 533	Carpenter, W. B. The Microscope and its Reveal- ations	264
Adenoma of the Rectum	613	Astigmatic Pencil, The	102	Carpenter, W. M. An Index to the Practice of Medicine	125
Adeno-osteo-chondroma of the Submaxillary Gland	697	Astigmatism of the Cornea, Ophthalmometric Re- searches on the, in Scholars from Seven to Twenty Years of Age	51	Ciccolina, S. M. A. Deep Breathing as a Means of promoting the Art of Song and of curing Weaknesses and Affections of the Throat and Lungs, especially Consumption	264
Adulterated Tea	215, 522	Asylum Assault Case, An, in Philadelphia	268	Clapp, H. C. Is Consumption contagious, and can it be transmitted by means of Food?	287
Adulteration, The, of French Wines	537	Asylum Mismanagement	608	Cowell, G. Lectures on Cataract; its Causes, Varieties, and Treatment	93
After-Pains	644	Asylum, A New Lunatic, in Toledo	242	Dunglison, Richard J. The Practitioner's Ready Reference Book	179
Air, Douches of Compressed, The Therapeutic Use of	505	Asylum, The Lunatic, on Ward's Island	719	Edes, R. T. Therapeutic Hand-book of the United States Pharmacopoeia	125
Albuminuria, A New Theory of	312	Asylum, The New York Infant, The Country Branch of	438	Ellis, John. A Reply to "The Academy's" Re- view of "The Wine Question in the Light of the New Dispensation"	179
Albuminuria, Periodic	75	Asylum, The Norristown Lunatic, The Recent Tra- gedy at	180	Fenner, C. S. Vision: its Optical Defects, and the Adaptation of Spectacles	59
Alcohol and Chloroform, The Concurrent Action of	719	Asylum, The Norristown, Homicide Case	215, 240	Fenwick, G. E. Excision of the Knee Joint, with Report of Twenty-eight Cases	517
Alcohol, Cold, as an Anesthetic; its Value in the Treatment of Burns and Scalds of the Extremi- ties	424	Asylum Superintendent, Removal of a	45	Ferrand, A. Clinica Therapeutica. Tratado de Terap��utica Medica, �� Guia para la Aplicaci��n de los Principales Modos de Medicaci��n a la Indicaci��n Terap��utica y al Tratamiento de las Enfermedades	261
Alcohol, Ethyl (Common), The Direct Action of, on the Heart	423	Asylum Superintendent, The Association of	15	Fort, G. F. Medical Economy during the Mid- dle Ages	237
Alcoholic Liquors; the Duty of the Hour; being an Examination of the Relation of the Medical Profession to the General Use of	472	Asylum Superintendent, Removal of a	45	Fritsch, H. The Diseases of Women	2-3
Alleluia, W. H. A Lecture on the Physical Basis of Physiology	197	Atlantic Journal of Medicine, The	214	Gangee, S. On the Treatment of Wounds and Fractures	516
Amblyopia, Crossed, and Hemianopsia in Cerebral Lesions	23	Atrophy, Aque Yellow, of the Liver	523	Gibbes, H. Practical Histology and Pathology	4-7
Ambulance Service, The	497	Atrophy, Left Iliac, of the Face	421	Gilliam, D. T. The Essentials of Pathology	416
Ambulance Service, The Bellevue Hospital	357	Automatism, Conscious	213	Gray, H. Anatomy, Descriptive and Surgical	604
Ambulance Service, The, in Jersey City	129	Auditory Canal, The External, Cases of Acute Des- quamative Inflammation of; Acute Otitis Me- dia; Mastoiditis, and Chronic Meningitis; Re- covery	105	Griesinger, W. Mental Pathology and Thera- pautics	11
Amenorrhoea, Manganese in the Treatment of	136	Aural Disease, The Association of, with Simple Sparkling Syphilis of the Vitreous Humor	106	Gross, S. W. A Practical Treatise on Impotence, Sterility, and Allied Disorders of the Male Sexual Organs	8-1
American Graduates in Great Britain, The Status of	310	Auriculo-ventricular Opening, Stenosis of the	277	Grosser, J. Die Arzneimittel der Pharmakopoea Germanica, editio altera, f��r die ��rtliche Prax- is ��bersichtlich zusammengestellt	519
American Medical Association and the Medical Corps of the Navy	7	Auto-Infection	729	Hammond, W. A. A Treatise on Insanity in its Medical Relations	461
American Medical Association, A Vice-President of the, on the Question of Ethics	12	Bacilli of Tubercle, The Diagnostic Value of the	523	Harrison, R. Observations on Lithotomy, Litho- trity, and the Early Detection of Stone in the Bladder, with a Description of a New Method of Tapping the Bladder	881
Amputation of the Entire Penis for Epithelioma	611	Bacillus of Tuberculosis, The, in an Abscess near the Anus	84	Hart, D. B. Manual of Gynecology	383
Amputation of the Penis, Two Cases of, with Trans- plantation of the Urethra into the Perineum, on account of Epithelioma	576	Bacteria, The Mutability of	704	Helminth, W. T. Suprapubic Lithotomy. The High Operation for Stone. The High Appa- ratus	433
Amputation at the Thigh for Knee-Joint and Phleg- monous Inflammation	553	Baldness, The Treatment of	506	Hermann, L. Experimental Pharmacology	819
Amyl Nitrite, The Effect of, on the Circulation in High Altitudes	458	Ball, Professor Benjamin, of Paris	45	Hill, B. The Essentials of Bandaging; with Di- rections for administering Ether and Chloro-	
Anatomical Chairs in Dublin	326	Baltimore Medical College, The	28		
Anatomy Law, The Pennsylvania	45	Bandage, An Improved	181		
Anesthetic Mixtures	540	Banks, Dr. James L. Resolutions on the Death of	28		
Anesthetics, Unusual Effects of	247	Bismuth Chloride, The Physiological Action of	478		
Anesthetization with Nitrous Oxide and Air, or Ni- trous Oxide and Oxygen under Pressure	244	Bathers' Cramp	167		
Aneurysm, Abdominal	413	Bathing Infants in the Sea	280		
Aneurysm by Anastomosis of the Face and Orbit; Electrolysis; Ligature of the Common Carotid Artery	637	Batter's Operation	238		
Aneurysm, Arterio-venous, in the Retina	22	Batter's Operation for Dysmenorrhoea and Pelvic Neuralgia	46		
Aneurysm, Arterio-venous, of the Common Caro- tid Artery and the Internal Jugular Vein	611	Bayles, George, on Causes of Melancholia	171, 202		
Aneurysm of the Ascending Posterior Part of the Aorta	393	Beaumont, M. Du Jardin	98		
Aneurysm of the Internal Carotid. Ligature of the Common and External Carotid and the Super- ior Thyroid Arteries	428	Beaumont, Professor Du Jardin. A Lecture on the Treatment of Meningitis	141		
Aneurysm, Cirroid, of the Wrist	643	Beer in the Paris Hospitals	42		
Aneurysm, Traumatic, of the Left Orbit. Case of, Cured by Compression of the Carotid Artery of the same Side	421	Bee's Sting, the, Fatal Effects from	14, 214		
Aneurysmal Tumor of the Orbit, Removal of an	182	Bequest, A Charitable, nullified	267		
Angioma, Carcinous, of the Tongue	182				

	PAGE		PAGE		PAGE
form, and for using other Surgical Apparatus, and containing a Chapter on Surgical Landmarks.....	604	Bull, C. S. Two Cases of Ophthalmoplegia Externa, associated with Disease of the Optic Nerves from Brain Tumor, with Autopsy.....	145	Casarean Hysterectomy.....	443
Hoffmann, F., and Power, F. B. A Manual of Chemical Analysis as applied to the Examination of Medical Chemicals.....	67	Bull, W. T. Remarks on the Treatment of Irreducible Hernia by Operation.....	680	Casarean Section.....	277
Hooper, F. H. Experimental Researches on the Tension of the Vocal Bands.....	319	Burchard, T. H. A Memorial of Frederick D. Lente, A. M., M. D.....	537	Chair, An Unoccupied.....	692
Holmes, T., and Hulke, J. W. A System of Surgery, Theoretical and Practical, in Treatises by Various Authors.....	379, 405, 432	Burial, A New Mode of.....	84	Chancre of the Eyelid.....	109
Hopkins, W. B. The Koller Bandage.....	604	Burial, A, without a Permit.....	157	Chancre, Extra-genital.....	366
Ludson, W. H. Seasickness: Its Cause, Nature, and Prevention without Medicine or Change of Diet.....	515	Bursa Olecranon, Thrombus of the.....	173	Chancre of the Mouth contracted during Abnormal Coitus.....	248
Hyde, J. N. A Practical Treatise on Diseases of the Skin, for the Use of Students and Practitioners.....	260	Byford, The late Professor William H., Jr.....	522	Chancre, the Virus of The Action of Heat on.....	676
Klein, E. Elements of Histology.....	717	Cactus Grandiflorus, The Use of, in Cardiac Affections.....	559	Chandler, Professor C. F.....	825
Lewin, L. The Untoward Effects of Drugs.....	617	Calcareous Particles passed <i>per vaginam</i>	163	Chandler, C. F. A Review Lecture on Magnetism and Electricity.....	453
Martin, H. Newell. Hand-book of Vertebrate Dissection.....	66	Calcium Sulphide in Aural Diseases.....	618	Charities, The Abuse of Medical.....	718
Milton, J. L. The Laws of Life and their Relation to Diseases of the Skin.....	463	Calculus, Renal, The Surgical Treatment of.....	648	Charity, A Suspected.....	72
Nettleship, E. Students' Guide to Diseases of the Eye.....	39	Calculus, Salivary.....	644	Charity and Correction, Public, The Cost of.....	497
Oppert, F. Hospitals, Infirmarys, and Dispensaries: their Construction, Interior Arrangement, and Management.....	496	Cammann, D. M. The Origin of Crepitant and Subcrepitant Rales.....	8	Charity, Health, and Lunacy, The Massachusetts State Board of.....	14, 97, 157
Parker, E. A. A Manual of Practical Hygiene.....	603	Cancer, Possible Etiological Relation of, to a Simple Application to the Cervix Uteri.....	160	Charity Hospital.....	238
Parrish, J. Alcoholic Inebriety from a Medical Standpoint, with Cases from Clinical Records.....	10	Cancer developed from a Non-malignant Sore.....	169	Charity Organization Society, The.....	14
Pharmacopœia, The, of the Northeastern Hospital for Children.....	578	Cancer of the Breast: Amputation.....	687	Chicago Lard.....	267
Philanthropos. Physiological Cruelty; or, Fact v. Fancy.....	516	Cancer of the Cervix Uteri? Can Cancer of the Penis be acquired by Inoculation from.....	457	Childbirth, The Perils of, and Life Insurance.....	127
Pfleger, L. S. The Treatment of Wounds: its Principles and Practice, General and Special.....	604	Cancer of the Cervix Uteri? Can Cancer of the Penis be acquired by Inoculation from.....	457	Children, A Clinical Lecture on some Nervous Affections in.....	705
Pitner, G. C. Electricity in Medicine and Surgery.....	67	Cancer of the Duodenum with Occlusion of the Biliary Duct.....	110	Chlorides, the Urinary, Variations of.....	536
Politzer, A. A Text-book of the Diseases of the Ear and Adjacent Organs.....	10	Cancer, Gallium Aparine for the Relief of.....	135	Chloroform and Alcohol, The Concurrent Action of.....	719
Ransome, A. On the Relation of the Chest Movements to Prognosis in Lung Disease, and on the Application of Stethometry to Examination for Life Assurance.....	263	Cancer, Internal, with Obscure Symptoms.....	471	Chloroform, Action of Mixtures of Air and Vapor of; a New Method of Anaesthesia.....	194
Richardson, B. W. Diseases of Modern Life.....	93	Cancer involving the Stomach, Liver, Pancreas, Rectum, and Lung.....	161	Chloroform Water, The Therapeutic Uses of.....	450
Ruata, C. Farmacopœia Nazionale e Generale, Materia Medica e Terapia.....	236	Cancer in Domesticated Animals. Some Notes on Comparative Pathology.....	659	Chlorophyll in Animals.....	435
Sattler, E. A History of Tuberculosis from the Time of Sylvius to the Present Day.....	433	Cancer of the Liver.....	443	Cholera.....	70, 96, 128, 156, 184, 214, 241, 267, 357
Schreiber, A. Atlas der Gelenkrankheiten nebst diagnostischen Bemerkungen und einem Abriss der Anatomie der Gelenke.....	318	Cancer of the Liver, Duodenum, Lungs, and Vertebra.....	417	Cholera Commission, The French.....	728
Starkweather, G. B. The Law of Sex.....	663	Cancer of the Esophagus.....	584	Cholera Commission, M. Pasteur's.....	130, 438
State Charities Aid Association. Hand-book for Hospitals.....	406	Cancer of the Stomach; Gastro-colic Fistula.....	161	Cholera, Copper as a Preventive of.....	412
Tait, L. The Pathology and Treatment of Diseases of the Ovaries.....	664	Cancer, Rectal; Colotomy.....	161	Cholera, The, and Cremation.....	130
Taylor, A. S. The Principles and Practice of Medical Jurisprudence.....	608	Cancer of the Rectum.....	644	Cholera, The, Danger of a Visitation of.....	12
The Scientific Proceedings of the Royal Dublin Society.....	319	Cancer of the Rectum; Secondary Cancer of the Liver.....	162	Cholera Debate, The, at the Paris Academy.....	181
The Scientific Transactions of the Royal Dublin Society.....	319	Cannabis Indica; a Valuable Remedy in Menorrhagia.....	58	Cholera, The, in the East.....	497, 549
Thomson, A., Schafer, E. A., and Thane, G. D. Quain's Anatomy.....	604	Capillary Blood-vessels, The, and the Lymphatic Radicles.....	71	Cholera, The, in Egypt.....	42, 403
Transactions of the College of Physicians of Philadelphia.....	406	Carbolic Acid, Absorption of.....	524	Cholera, The, in Egypt, and the British Government.....	590
Von Klein, C. H. Tabulæ Anatomicae Osteologicae.....	578	Carbonic-Oxide Poisoning, Refusion in.....	625	Cholera in Egypt, The Study of the.....	241
Wells, J. S. A Treatise on Diseases of the Eye.....	603	Carcinoma of the Breast.....	558	Cholera Germs, The Breeding of.....	279
West, S. How to examine the Chest.....	67	Carcinoma of the Larynx.....	694	Cholera, The Indian Origin of the, in Egypt.....	251
Wood, G. B., and Bazhe, F. The Dispensary of the United States of America.....	124	Carcinoma of the Skull.....	221	Cholera, Intra-venous Injection of Biliu as a Remedy for.....	250
Wood, H. C. A Treatise on Therapeutics, comprising Materia Medica and Toxicology, with Especial Reference to the Application of the Physiological Action of Drugs to Clinical Medicine.....	179	Carcinoma of the Stomach and Liver.....	414	Cholera in Ireland.....	412
Working Bulletins for the Scientific Investigation of the Newer Materia Medica.....	179	Carcinoma of the Stomach, Liver, Spleen, and Intestine.....	500	Cholera Morbus in Connecticut.....	97
Ziegler, E. A Text-book of General Pathological Anatomy and Pathogenesis.....	406	Carleton, Charles M. A Case of Strangulated Inguinal Hernia, with an Undescended Testicle.....	92	Cholera, Precautions against the.....	95
Boston, Letter from.....	353, 434, 463	Carotid, the Internal, Aneurysm of; Ligature of the Common and the External Carotid and the Superior Thyroid Arteries.....	428	Cholera, The Progress of the.....	40
Boston Water Supply, The Pollution of the.....	45	Carroll, A. L. Note on the Treatment of Migraine.....	546	Cholera, A New Treatment of.....	522
Botany, The Value of an Acquaintance with, as a Preliminary to the Study of Medicine.....	414	Cartilages, Dislocation of the Sternal End of the Clavicle, with Dislocation of the First and Second Costal. Also a Case of Dislocation of the Cartilages of the Fourth, Fifth, and Sixth Ribs.....	34, 62	Cholera, Fatal Cases of.....	362
Boylston Prize, The.....	45	Cataract, Loss of an Eye from Sewer-gas after Extraction of a.....	103	Chorea, Laryngeal.....	592
Bradfield, T. N. A Possible Result of Hot Vaginal Injections.....	408	Cataract, The New Method of Extraction of, without Excision of the Iris.....	23	Chorea, Cough.....	703
Brain Exhaustion and its Treatment.....	712	Cataract Extraction, Thirty-five Cases of.....	100	Choroid, Coloboma of the.....	131
Brain, the, in Health and Disease, On a Method of demonstrating the Connections of.....	645	Cataract Extractions, A Further Modification in.....	103	Choroid, Ossification of the.....	132
Brain Complications, The Recognition of, in Aural Affections.....	104	Cataract Extractions, Report of the Eighth Series of One Hundred Consecutive, with Remarks.....	25	Choroid, Sarcoma of the, with Interesting Clinical Features.....	102
Brain, Congenital Malformation of the.....	416	Cataract Operations, Some Improvements in Instruments and Appliances for.....	99	Choroid, Tubercle of the.....	100
Brain, The Relative Extensibility of the Superficial and the Deep-seated Portions of the.....	729	Cataract, Trituration of the Cortex of.....	102	Chyluria, the Treatment of, Encephala Gracilis in.....	252
Brain Ganglia, The.....	591	"Cavernous Angioma," Removal of a, of the Tongue.....	251	Chrysophanic Acid in Skin Affections.....	472
Brain, Injury of the, without Impairment of its Functions.....	277	Cellular Tunic, the Retro-ocular, Inflammation of.....	530	Cicatrical Contraction from a Burn.....	555
Brain and Spinal Cord, Contusions of the.....	56	Cerebral Abscess with Bilateral Choked Disc; Basilar Meningitis and Perimenitis and Descending Interstitial Optic Neuritis.....	420	Cicatrizaton and Cornification of the Skin.....	678
Brain Tumor, Two Cases of Ophthalmoplegia Externa, associated with Disease of the Optic Nerves from, with Autopsy.....	145	Cerebral Atrophy, Probable, in an Infant.....	16	Cider and Alcoholism.....	438
Brandy, French.....	630	Cerebral Cortex, The.....	318, 348	Ciliary Muscle, Weakness of the, Very Dilute Solutions of Eserine in the Treatment of.....	139
Brecon Presentation.....	5-6	Cerebral Disease, On the Value of Eye Symptoms in the Localization of.....	51	Ciliary Muscle and Iris, Tuberculosis of the.....	100
British Medical Association, The Meeting of the.....	68	Cerebral Exhaustion.....	635	Cinchona, The Cultivation of, in South America.....	268
Bromides, The Unusual Effects from.....	193	Cerebral Softening.....	499	Cinchonidine, Is Sulphate of, an Oxytocic?.....	646
Bronchial Catarrh.....	602	Cerebral and Spinal Architecture, A Diagrammatic Summary of some of the Principal Features of.....	36	Cincinnati, Letter from.....	464
Broncho-Pneumonia with Delirium.....	527	Cervix, Long, Conical.....	59	Circular, The President's.....	385
Browne, B. B. A New Operation for the Reduction of Chronic Inversion of the Uterus.....	577	Cervix Uteri, Analysis of Twenty-seven Operations for the Restoration of the Lacerated, with Special Reference to the Effect on Sterility and Labor.....	48, 76	Clark, Alonzo. Two Cases of Poisoning with Illuminating Gas successfully treated by the Inhalation of Oxygen.....	148
Buffalo, Letter from.....	310	Cervix Uteri? Cancer of the, Can Cancer of the Penis be acquired by Inoculation from.....	457	Clark, Sir Andrew, and his Critics.....	437
		Cervix Uteri, Carcinoma of the.....	53	Clavicle, Dislocation of the Sternal End of the, with Dislocation of the First and Second Costal Cartilages. Also a Case of Dislocation of the Cartilages of the Fourth, Fifth, and Sixth Ribs.....	34, 62
		Cervix Uteri, Internal Division of the, for Dysmenorrhœa.....	500	Clavicle, the Sternal End of the, Case of Dislocation of.....	318
		Cervix Uteri, Laceration of the.....	58, 59	Cleanliness, The Importance of, in Surgical Operations.....	328, 510
		Cervix Uteri, Laceration of the, An Analysis of Thirty-one Operations for Repair of.....	583	Clements, B. A. Case of Dislocation of the Sternal End of the Clavicle.....	318
		Cervix Uteri, Laceration of the, with Retroversion.....	58	Club-Foot, A Contribution to the Treatment of.....	429
		Cervix Uteri, the Lacerated, The Effect of the Operation for the Restoration of, on Fertility.....	333	Coal Gas and Water Gas, The Comparative Poisonous Properties of.....	42
		Cervix Uteri, Laceration of the, Secondary Hemorrhage after Operation for.....	221	Coccygectomy.....	360
				Code Circular, The National.....	386
				Code Controversy, Is the, a Case of Two Men and the Shield?.....	157
				Code Controversy, The Importance of the.....	467
				Code, The Supporters of the Old, in the State of New York.....	44
				Coe, H. C. Cases of Sarcoma of the Uterus.....	65
				Coggswell, Dr. C. H.....	215
				Coitus, First, attended by Extensive Laceration of the Wall of the Vagina and followed by Profuse Hemorrhage.....	221
				Colleges, The, and the Licensing Power.....	467
				College, Central, of Physicians and Surgeons, Indianapolis.....	290
				College, The Columbia Veterinary.....	563
				College, The Columbia Veterinary, Lectures.....	582
				College Hospital, Long Island.....	303
				College Hospital, Minnesota.....	295
				College of Medicine and Surgery, Cincinnati.....	304
				College of Medicine, Fort Wayne.....	289
				College of Medicine, Michigan.....	295
				College of Medicine, Quincy, Medical Department of Chaddock College.....	289
				College of Medicine, Syracuse University.....	302
				College of Midwifery, The.....	15
				College of Physicians and Surgeons, Boston.....	294

	PAGE		PAGE		PAGE
College, The, of Physicians and Surgeons	384	Delirium, The, of Persecution, and Bequests to Hospitals	183	Electrolytic Method, The Exact Value of the	415
College of Physicians and Surgeons, The, of Buffalo	15	Dengue, Last Year's Epidemic of, in Bermuda	322	Elephantiasis Vulvæ	55
College of Physicians and Surgeons of Chicago	288	Dermatitis, General Exfoliative	270	Embolism of the Basilar Artery	582
College, Royal, of Physicians and Surgeons	283	Dermatology, A Clinical Album of	97	Emetic Salts, A New Series of	183
College of Physicians and Surgeons, The Iowa	291	Dermatological Association, The American, 17, 194	266	Eupnyemia, Limited	715
College of Physicians and Surgeons, Keokuk	290	Dermoid Tumor of the Eye, Four Cases of	52	Encephalic Center, The, of Perception; its Site and Secondary Nature	645
College of Physicians and Surgeons, New York	298	Diabetes	73	Endometritis, Subacute	57
College of Physicians, The Royal, The Registrar of	73	Diabetes Mellitus Vulgaris, Notes on the Essential Nature of	85	Epidemic, The, at Brewton, Ala.	468
College of Physicians and Surgeons, St. Louis	297	Diabetes, The Yeast Theory of	85	Epidemic, The Late Egyptian	438
Collis Law, The Interpretation of	355	Diagnosis, Mistaken, of Small-pox	183	Epilepsy, Masked	728
Color-Blindness in the Navy	666	Diarrhea, The Theory of Fifth as a Cause of	395	Epithelioma, Two Cases of Amputation of the Penis with Transplantation of the Urethra into the Perineum on Account of	576
Colors, Reception of, at the Periphery of the Retina	21	Dietary, the, of Young Children, The Use of Water in	347	Epithelioma of the Auricle, A Case of Primary; Removal of the Entire Auricle by the Thermocautery	104
Colotomy, Lumbar	531	Dietetics for the Sick	359	Epithelioma, The Relation of Laceration of the Cervix Uteri to	249
Colpenter, The Use of the, as a Preliminary to Freund's Operation	450	Digestion, The Influence of Calcium on	224	Erectile Tumor of the Eyelids	52
Conception, The Prevention of	79	Digestion, Gastric, The Hydrochloric Acid of	410	Ergot: the Use and Abuse of this Dangerous Drug	359
Congenital Absence of the Forearm and Hand	365	Diphtheria	219	Erie County Society's, The, Medical Bill	579
Congenital Deformities	366	Diphtheria in an Infant Asylum	412	Erysipelas, Arterocarpus Incision in the Treatment of	196
Congenital Displacements, A Singular Case of, in a Dog	490	Diphtheria, The Nature and Treatment of	139	Erysipelas Migrans	249
Congenital Malformation of the Hand	662	Diphtheria, Malignant	325	Erysipelas Neonatorum, Case of	222
Congress, The Anti-vaccination	357	Diphtheria, Modified	78	Erythroptosis, The Question of the, of Aphakial Eyes	530
Conjunctiva and Cornea, Xerosis of the, in Small Children	528	Diphtheria, Perchloride of Iron in	138	Eruptions, Drug, The Pathogenesis of	273
Conjunctivitis, Catarrhal, with Consecutive Arthritis	531	Diphtheria, Treatment of, with Blue-gum Steam	451	Eruption, A Peculiar Papillary	275
Conjunctivitis, Epidemic	249	Diphtheria, The Treatment of, with Blue-gum Steam	451	Eserine Solutions, The Permanence of	131
Conjunctivitis, Puerulent, The Prophylaxis of, in New-born Infants	419	Diploma, A Suit to obtain a	139	Esslöf, Fort mit dem	412
Constipation, Cascaræ Sagrada for	195	Disease, A, among Cattle in New Hampshire	130	Ethiopianism, An	648
Constipation in Infants	168	Disease, A Chinese, in British Columbia	71	Ethical Incident, An	25
Consumption, Is, Communicable?	593	Disease, The Propagation of, by Books	507	Ethics, The, of Sentiment and the Ethics of Practice	111
Consumption, Germicide Inhalations in the Treatment of	154	Disease, The Spread of, by Soiled Linen	547	Ethics, Remarks on Codes of	175
Consumption as a Preventable Disease	633	Disease, The Foot and Mouth	182, 212, 325, 384	Ethics at Sandy Hook, Conn.	79
Consumption, Pulmonary, The Treatment of	439	Disease, The Foot and Mouth, An International Aspect of	181	Ethics in Vermont	79
Convulsions in Children, The Causes of	449	Disease Germs; their Vitality; Means of Rendering them Innoxious	535	Etiquette, Our, from a Canadian Point of View	265
Convulsions, Infantile, and Eczema	364	Disease among Horses, An Outbreak of	97	"Evaporated" Milk	129
Cooper, H. C., The Agony of Death by Crucifixion	459	Diseases of Children, A Clinical Lecture on	509	Evolution and the Treatment of Wounds	46
Copper and Cholera	170	Diseases of Domestic Animals	412	Examination, The Entrance, for the University of Pennsylvania	152
Cornea, Band-shaped Opacity of the	25	Diseases, Epidemic	589	Examination, The Preliminary, and the Graded Course	494
Cornea, Scirrhous, Ulcers of the, Iodoform in	421	Diseases, Epidemic, The Joint Congressional Committee on	666	Excision, Primary, of the Elbow Joint, for the Injury of the Elbow	611
Corneæ, both, Anæsthesia of	71	Diseases, The Infectious, of Cattle	384	Excision of the Wrist Joint	636
Corning, J. L., Brain Exhaustion, and its Treatment	712	Diseases, The Infectious, of Domestic Animals	580	Exhaustion, Brain, and its Treatment	712
Coroners' Autopsies, Fees for	276	Diseases, Infections, The Notification of	496	Exophthalmus, Pulsating, A Case of; Ligation of the Left Common Carotid; Death	419
Coroners, A Decision limiting the Powers of	42	Diseases of the Skin, Clinical Lectures on	452	Exophthalmus, Traumatic Pulsating, A Case of, partially cured by Ligation of the Common Carotid; totally cured by Extirpation of the Ancrurnal Varix of the Orbit	422
Coroners, Rivalry among	43	Disinfectants, Note on	125	Exostosis, Ivory, of the Ethmoid	583
Corpses reclaimed from a Dissecting-Room	666	Disinfection, The, of Mail Matter at Marseilles	195	Explanation, A Personal	386
Corrosive Sublimate and Thymol, The Use of, in Embalming	168	Dislocation, an Old, of the Shoulder, Death from an Attempt to reduce	396	Eye Bandage, A New Form of	530
Cortex, The Cerebral	313, 345	Dislocation, Double, of the Patella	610	Eye Complications and Visual Disturbances in Tabes Dorsalis	531
Counter Prescribing	14	Dislocation of the Sternal End of the Clavicle, with Dislocation of the First and Second Costal Cartilages. Also a Case of Dislocation of the Cartilages of the Fourth, Fifth, and Sixth Ribs	34, 62	Eye, The Effects of Strong Light upon the	529
Courier-Record of Medicine, The Texas	549	Dislocation of the Semilunar Cartilage of the Knee Joint	564	Eye, Injuries of the, due to a Fall	538
Couvreuse, The, or Mechanical Nurse	279	Dislocation of the Sternal End of the Clavicle, Case of	318	Eye, Injury to the, by hanging	131
Cow-pox, A New Case of, in France	130	Dislocation, Subcoracoid, of the Humerus, Report of Twenty-one Cases of, reduced by Kocher's Method	344	Eye, Sympathetic Inflammation of the	418
Crandall, C. R., Two Cases of Fatty Degeneration of the Heart, with Remarks	685	Dislocations at the Elbow, A Method of reducing	725	Face, Bloody Operations on the, Three Cases of Extensive	456
Crane, The Late Surgeon-General	562	Dispensary, A Free, in Baltimore	326	Face Presentation with Eclampsia	334
Cremation	468	Dispensary, The New Boston	479	Feet, Profuse and Fætid Perspiration of the, Subnitrate of Bismuth as a Remedy for	250
Cremation and the Cholera	130	"Doc," The	68	Femoral Artery, Obstruction of the, not preceded by Embolism	338
Cremation in Philadelphia	357	Doctors and Laboring Men	357	Femoral Hernia in an Aged Patient; Strangulation: Operation, with Cure	393
Cremation proposed in New Orleans	268	Doctors' Bills, Liability for	496	Fever, Hysterical	703
Croup, Symptoms of, relieved by Tartarized Antimony	643	Doudaké Bark, Extract of, and its Alkaloid, Doudakine	278	Fever, Mediterranean	704
Crucifixion, The Agony of Death by	150	Drain-Drinking among Women	437	Fever, Pernicious Remittent (?)	695
Cruise, The, of the Corwin	607	Drinking-Water, Contamination of the Chicago	182	Fever, Puerperal	665
Crystalline Lens, Investigations into the Relations, Form, and Mode of Suspension of the, in the Physiological State	24	Druggist, A, exonerated	326	Fever, Puerperal, The Prevention and Treatment of	649
Current Selector, A New	277	Drugs, The New Tariff on	28	Fever, Urethral	661
Cyanosis, Congenital	602	Dubois-Reymond, Professor	648	Fever, Typhoid and Remittent	696
Cyst, Congenital, of the Neck	276	Dulles, C. W., Criticisms on the Specific Theory of Hydrophobia	707	Fibro-chondroma, or Heteroplastic Enchondroma of Virehow, of the Sclerotic and Cornea in a Child; Extirpation	421
Cyst of the Broad Ligament	366	Dysentery in Buffalo	412	Fibroid Tumor of the Uterus removed by the Galvanic Cautery and by Enucleation	47
Cyst of the Broad Ligament containing Thirty-eight Pints of Fluid	46	Dysmenorrhœa, The Mechanical Theory of	310	Fibrous Polypus simulating Inversion of the Uterus	613
Cyst, Suppurating, of the Broad Ligament, which had perforated the Bladder	165	Dysmenorrhœa, Some Points connected with the Subject of	329	Filaria sanguinis	111, 673
Cysticercus Cellulosa in the Vitreous; Extraction of the Parasite; Preservation of the Eye and of the Visual Power Present	23	Dyspnea from the Use of Salicylic Acid	67	Filth and Contusion	27
Cystic Tumor of the Abdomen	527	Ear, The Influence exerted by the Treatment of one, upon the other Ear	54	Finger and Tendon, A Detached	74
Cystic Tumor, The History of a Case of Abdominal, where, Seven Years after Removal of the Tumor by Laparotomy, a Second Operation was demanded; Tapping through the Vagina resorted to, with Consequent Death of the Patient	106	Ear, Disease of the, occurring during the Course of Parotitis	55	Fissure, Congenital, of the Female Urethra, with Extrophy of the Bladder	380
Cystotomy by a Modified Lateral Method in Certain Cases of Enlarged Prostate	83	Ear, Dr. Pomeroy on Diseases of the	694	Fistula, Urethral	615
Cysts of the Parovarium	698	Ears, Diseased and Healthy, The Effects of Noise upon	619	Fistula, A Probe for the Examination of	615
Cysts, The Treatment of Sebaceous, by Injections of Ether	702	Ears, The Examination of, by Means of the Tuning-Fork	54	Foot and Mouth Disease, The	182, 212, 325, 384
Danger from Flies	507	Eclampsia, Puerperal, Veratrum Viride in the Treatment of	368	Foot and Mouth Disease, the, An International Aspect of	181
Deafness, Artificial, The Production of, and its Bearing on the Etiology and Evolution of Ear Diseases	618	Ectopia of the Eye-ball, A case of, caused by Osteophytes of the Orbital Roof with Consecutive Pneumatosis of the Supra-orbital Region	419	Forceps Labor, Fifth Position	585
Death following the Bite of a Spider	241	Ectopia Lentis, Two Cases of Congenital; one Symmetrical, the other Non-Symmetrical	101	Forceps, The Tarnier	479
Death, A Case of, from a Wasp Sting	424	Eczema, The Treatment of	166	Forearm, Foreign Body in the	73
Deaths, The Registration of, in Brooklyn	98	Eczema of the Face, Pomade for	223	Foreign Bodies in the Air-Passages	556
Death from the Sting of a Bee	27	Eklund, F., Notes on the Essential Nature of Diabetes Mellitus Vulgaris	85	Foreign Bodies Encapsulated in the Background of the Eye, with Maintenance of Good Vision	422
Decker, A. D., Case of Sloughing Irreducible Hernia; Spontaneous Recovery	660	Electric Currents, Continuous, The Action of, applied in the Neighborhood of the Brain, and the Results which they produce, especially on the Eye	422	Foreign Body, A Curious, in the Throat	213
Decomposed Animal Matter in Water used for Drinking and Domestic Purposes for fully Two Weeks or Longer, without any Deleterious Effects, by a Garrison of at least Eighty Souls	484	Electric Lamp, An, for Surgical Purposes	729	Foreign Body in the Hand	192
Degeneration, Fatty, of the Heart, Two Cases of, with Remarks	685	Electric Light, The Effects of the, upon the Eye	21	Foreign Body in the Rectum, A Case of	715
DeLafield, Francis, Lectures on Diseases of the Kidneys	1, 144, 311, 369, 621	Electricity as a Galactagogue	138	Fetal Development, Arrest of	613
		Electricity and Magnetism, A Review Lecture on	453	Fracture, Compound Comminuted, of the Skull; Absence of Brain Symptoms; Healing by First Intention; Recovery	610
				Fracture, Depressed, of the Skull; Trephining	687

	PAGE		PAGE		PAGE
Fracture, Compound, of the Thigh at the Junction of the Shaft with the Lower Epiphysis; Amputation.....	587	Guarding the Public Welfare, and the Eminent Domain of Sanitary Science.....	538	Index-Catalogue, The.....	521
Fracture, Ununited, of Left Thigh, a Hand's Breadth above the Patella; Resection; Fragments United by Wire Sutures.....	697	Hearing Power, Observations on the, in Different Conditions.....	106	"Index Medicus," The.....	666
Fracture of the Lower Jaw.....	695	Heart, A Very Large.....	584	Infant, Arrest of Development, Giant Growth, and Lipomatosis in an.....	110
French Brandy.....	630	Heart, Displacement of the, by Violence.....	700	Infant Mortality and the "Baby's Bottle,".....	167
Freund's Operation for Extirpation of the Uterus.....	620	Heart, Enormous Hypertrophy of the.....	723	Infants, How to Bring up.....	167
Fungi, The Filiform, <i>Aspergillus Flavus</i> , <i>Niger</i> , and <i>Fumigatus</i> ; <i>Eurotium Repens</i> and <i>Aspergillus Glaucus</i> , and their Relation to <i>Otomycosis Aspergillina</i>	55	Heart, Probable Injury of the, Due to a Fall.....	249	Infection, A New Source of Danger from.....	324
Galium Aparine as a Remedy for Chronic Ulcers.....	27	Heart, Rupture of the.....	500	Infectious Diseases in New York.....	214, 241, 267, 325, 356, 353, 412, 438, 465, 497, 522, 549, 550, 608, 665, 692
Gangrene, Corneal, produced by Inanition.....	532	Heart, Two Cases of Fatty Degeneration of the, with Remarks.....	655	Infectious Diseases, The Notification of.....	496
Gangrene, The Origin of "Spontaneous".....	730	Hemeralopia, The, of the Tropics.....	411	Infectious Diseases of Domestic Animals.....	241, 267
Garrigue, H. J. Diagnosis of Ovarian Cysts by Means of the Examination of their Contents.....	353	Hemeralopia and Xerophthalmia from Disturbances of Nutrition.....	422	Infirmary, The New York Eye and Ear.....	715
Gartner's Canals, Diseases of.....	135	Hemianopsia Sindstra, A Case of Binocular, with an Account of the Autopsy and of the Microscopical Examination.....	25	Infirmary, The Union Protestant, of Baltimore.....	44
Genito-urinary Practice, Cases in.....	431	Hermaphroditism, A Case of Masculine False, in a Calf.....	815	Inhaler, An Improved.....	727
Germicide Inhalations in the Treatment of Consumption.....	154	Hernia, Irreducible, Remarks on the Treatment of, by Operation.....	650	Inhumanity, A Wisconsin Surgeon's Alleged.....	43
Gestation, Prolonged.....	361	Hernia, Prolonged Taxis for the Reduction of.....	193	Injections, Hot Vaginal, A Possible Result of.....	403, 694
Gestation, Prolonged Intra-uterine.....	17	Hernia, Sloughing Irreducible, Case of; Spontaneous Recovery.....	660	Inoculation, Modified Small-pox.....	691
Gestation, Tuhul, Rupture of the Tube at the End of the Second Month; Internal Hemorrhage; Abdominal section; Ligation of the Tube; Death in Forty-seven Hours from Shock.....	637	Hernia, Strangulated.....	364, 500	Inoculation, Subcutaneous, for Sheep-pox.....	725
Gibney, V. P. A Case of Bilateral Separation of the Extensor Tendons from the Patellar Insertion.....	714	Hernia, Strangulated Inguinal.....	499	Inane, The, Connecticut Hospital for the.....	325
Gibson, Albert L. The American Medical Association and the Medical Corps of the Navy.....	7	Hernia, Strangulated Inguinal, A Case of, with an Undescended Testicle.....	92	Insane Criminals, The Responsibility of.....	72
Glanders in Illinois.....	70	Hernia, Strangulated, The Treatment of the Sac in Operations for.....	725	Insane, The, of Lynn, Mass.....	325
Glanders in New Jersey.....	130	Herpes Progenitalis in Women.....	673	Insanitary School-Houses.....	412
Glaucoma, A Contribution to the Operative Treatment of.....	101	Herpes Zoster.....	132	Institute of Technology, The Massachusetts.....	139
Glaucoma, The Difficulties in Making a Differential Diagnosis in.....	131	Hippurate of Sodium.....	51	Instruments, Improved Nasal and Aurial.....	620
Glaucoma, Sympathetic.....	23	Holt, L. E. Tonic Spasm of the Trapezius Muscle of Malarial (?) Origin.....	629	Insurance Company, The John Hancock Mutual Life.....	727
Glycosuria, Bromide of Potassium for.....	339	Homoeopathic Cure, A.....	224	Intestinal Obstruction, Operative Procedures in Cases of.....	703
Goitre, Acute, Bifiodide of Mercury as a Remedy for.....	194	Homoeopathy.....	424	Intestinal Peristalsis.....	169
Goitre, Exophthalmic, A Clinical Lecture on.....	59	Honorary Degrees.....	15	Intestines, Foreign Bodies in the.....	75
Goitre, The Excision of.....	701	Honors, A Graduation in.....	212	Intraocular Tension in the Whites, Half-Breeds, Negroes, and Native Indians of South America.....	50
Goldsbrough, Dr. N. C., of Louisville.....	45	Hospital, the Management of a, Quarrel over.....	436	Intussusception.....	362
Gonorrhea, The Histology of.....	507	Hospital Administration, Stinginess in.....	41	Inversion of the Uterus.....	579
Goodeil, W. A Clinical Lecture in Gynecology.....	565	Hospital, The American Veterinary.....	182	Inversion, Chronic, of the Uterus, A New Operation for the Reduction of.....	577
Gout.....	74	Hospital, The Boston City.....	129	Investigators, Scientific, Honors to.....	631
Gout and Diabetes.....	393	Hospital, The Carney, Boston.....	130	Iodoform in Chronic Cystitis.....	590
Gouty Tumor of the Heel.....	461	Hospital, Charing-Cross.....	140	Iodoform in Ophthalmic Therapeutics.....	533
Government, The British, and the Cholera in Egypt.....	580	Hospital, The Children's, Boston.....	215	Iridoplegia, Unilateral Reflex, associated with Necrosis of the Orbital Roof on the same Side, and with Double Optic Neuritis.....	420
Graded Course, The Preliminary Examination and the.....	494	Hospital, The Free, for Women, Boston.....	465	Iris, Tubercle of the.....	99
Grande Hysterie in a Man.....	109	Hospital, The Garfield Memorial.....	260, 412	Iron and Arsenic in Anemia and Chlorosis.....	251
Grave Robbery, Alleged, in Baltimore.....	666	Hospital, Guy's, London.....	354	Iron, Sulphate of, A Case of Poisoning by.....	401
Guild, St. John's, The Beneficent Work of.....	44	Hospital, The Hartford.....	242	Jackson, George Thomas. Acne: its Etiology, Diagnosis, and Treatment.....	227
Gunshot Wounds, A Lecture on the Treatment of.....	451	Hospital, The Maine General.....	357	Jacoud, An Honor to M.....	357
Gynecology, A Clinical Lecture in.....	57, 225, 565	Hospital, A Marine, for New York.....	634, 666	Jefferson College, A New Professor of Obstetrics at.....	15
Gynecological Society, the American, The Eighth Annual Meeting of.....	267	Hospital, The Meath, Dublin.....	130	Jequirity in Algeria.....	532
Hall, Lucy M. A Case of Poisoning by Sulphate of Iron.....	401	Hospital, A, at North Adams, Mass.....	215	Jequirity, The Clinical Use of.....	531
Halsted, W. S. Refusion in Carbonic-oxide Poisoning.....	625	Hospital, The New York Skin and Cancer.....	549	Jersey, C. A. Report of Twenty-one Cases of Subcoracoid Dislocation of the Humerus reduced by Kocher's Method.....	844
Hamaeufis, Further Notes on the Use of, in the Treatment of Varicose Veins.....	639	Hospital, The Nursery and Child's.....	242	Journal, The Boston Medical and Surgical.....	324
Hamilton, A. McL. Note upon the Treatment of Migraine.....	546	Hospitals, the Paris, The Appointment of Externes in.....	223	Journal, A New Mexican.....	267
Hammond, W. A. The Treatment of Migraine.....	544	Hospital, The Philadelphia.....	354	Journal, A New Spanish.....	325
Hare-Lip, The Operation for.....	700	Hospital, The Presbyterian.....	242	Kairine.....	696
Harrison, G. T. A Case of Puerperal Septicæmia.....	346	Hospital, Saturday and Sunday.....	549	Kairine as an Antipyretic.....	724
Harvard Odontological Society, The.....	15	Hospital, St. Bartholomew's, London.....	325, 412	Kelsey, Charles B. A Novel Operation for the Relief of Incontinence of Fæces.....	38
Harvard Medical School.....	45, 184, 326	Hospital, St. Joseph's, in Lancaster, Pa.....	265	Kentucky School of Medicine, The.....	15
Harvey, William.....	520	Hospital, St. Peter's, Albany.....	73	Keratitis, Experimental, and its Bearing upon Stricker's Theory of Inflammation.....	530
Harvey, The Remains of.....	439	Hospital, St. Vincent's.....	438	Kerr, J. G. Six Surgical Cases treated in the Medical Missionary Society's Hospital.....	91
Hay-Fever Association, The.....	268, 598	Hospital, St. Vincent's, The New Wing of.....	666	Kidd, Dr., of Dublin.....	98
Hay Fever, The Treatment of.....	195	Hospital, The Sisters', Buffalo.....	412	Kidney, Complete Destruction of the, by Cancerous Disease: Removal.....	78
Hæmorrhage, On Dangerous, from the External Genital Organs during and after Labor.....	135	Hospital Teaching, The Decay of.....	239	Kidney, Floating.....	83
Hæmorrhage, Bronchial, with Unusual Symptoms.....	445	Hospitals, Field, The Hero of.....	496	Kidney, the Extirpation of.....	500
Hæmorrhage in Hip-Joint Operations.....	725	Hughes, C. H. The Loss of Tendon Reflex, not simply its Absence, the Significant Sign in Locomotor Ataxia.....	599	Kidneys, Lectures on Diseases of the.....	1, 144, 311, 360, 621
Hæmorrhage, Post-partum, The Treatment of.....	134, 561	Humerus, Subcoracoid, Dislocation of the, Report of Twenty-one Cases of, reduced by Kocher's Method.....	314	Knee Joint, Disease at the.....	499
Hæmorrhage, Puerperal, Some Forms of, A Lecture on.....	425	Humphry, Professor.....	45	Knee Joint, Opening of the, for Supposed Movable Cartilage.....	492
Hæmorrhage, Secondary, Hot Water in, after Pelvic Operations.....	325	Humphry, Professor G. M., F. R. S.....	184	Koprolith, A.....	74
Hæmorrhoids, The Anatomy of.....	728	Hunter, James B. A Clinical Lecture in Gynecology.....	57	Labor, The Use of Anæsthetics during.....	561
Healer, The Christian.....	635, 666	Hutchinson, Mr. Jonathan, F. R. S.....	130	Labor, The Duration of.....	134
Health Association, The American Public.....	252, 479, 635	Hutchinson, Dr. Joseph C., of Brooklyn.....	265, 465	Labor, Induced Premature, for Great Edema of the Labia Minora.....	134
Health, The, of Boston.....	213, 549	Huxley, Professor.....	45	Labor, Induction of Premature, for the Relief of Suppression of Urine.....	133
Health, The Cincinnati Board of.....	211, 266	Hydatid Mole.....	533	"Lancet," An Awkward Tribute to the Founder of the.....	324
Health, The, of Connecticut.....	665	Hydatidiform Degeneration of the Placenta.....	397	"Lancet," The Growth of the.....	450
Health Department, the, A New Building for.....	267	Hydraunius, Acute.....	333	Laparotomy, Exploratory, Three Years after Battery's Operation.....	17
Health, The Effect of Mental Work on.....	153	Hydrocele injected with Pure Carbolic Acid.....	493	Laparotomy, The Management of Accidental Puncture and other Injuries of the Gravid Uterus as a Complication of.....	331
Health, The Illinois State Board of.....	411	Hydrocele, Observations on, founded on an Analysis of One Hundred and Fifty Cases.....	632	Larynx, A Leech in the.....	620
Health, The Indiana State Board of.....	265	Hydrocele, The Treatment of.....	527	Larynx, Does Excision of the, tend to the Prolongation of Life?.....	154
Health, The Indiana State Board of, and its Late Secretary.....	323	Hydrocephalic Cry, The.....	93	Lateau, Louise, The Death of.....	357
Health, The Kentucky State Board of.....	465	Hydrocephalus.....	364, 671	Lead Poisoning.....	396
Health, The Louisiana State Board of, and the Sanitary Council of the Mississippi Valley.....	242	Hydrocephalus with Inflammatory Atrophy of the Optic Nerve.....	529	Leaming, J. R. Is Consumption Communicable?.....	593
Health, Lunacy, and Charity, The Massachusetts State Board of.....	14, 97, 157	Hydrochloric Acid, The, of Gastric Digestion.....	400	Lectures, the Cartwright for 1884.....	720
Health, The, of Michigan.....	666	Hydrophobia, An Alleged Case of.....	44	Leeds, Professor, The "Medical Herald" on.....	183
Health, The Missouri State Board of.....	324	Hydrophobia, Criticisms on the Specific Theory of.....	707	Lente, Frederick D., A. M., M. D., A Memorial of.....	537
Health, The, of the Navy.....	154	Hygiene, The Austrian System of School.....	184	Leprosy in Egypt.....	97
Health, State Boards of, Connected Action by.....	635	Hypnotics, Paraldehyde and Acetal.....	339	Leprosy in New Brunswick.....	182, 272
Health, State Boards of, and Medical Practice.....	630	Hypophosphites, the, An Acid Solution of.....	562	Leprosy, Precautions against, in San Francisco.....	468
Health, The Usefulness of State Boards of, in		Hysteria, Precocious.....	135	Leptothrix in Tonsillar Concretions.....	73
		Hysterectomy, The Indications for.....	201	Lens, the Human, The Vortex and the Nuclear Arch of.....	418
		Hysterectomy, Vaginal, for Epithelioma of the Cervix Uteri.....	698	Lichen Planus, A Hypertrophic Form of.....	673
		Hysteria, Sudden Death in.....	641		
		Hystero-Epilepsy as a Complication of Pregnancy.....	699		
		Image, the Sensible, Variations in the Diameter of, of a Luminous Point.....	529		
		Impetigo Contagiosa.....	270		
		Impregnation, Artificial.....	410		
		Incontinence of Fæces, A Novel Operation for the Relief of.....	38		

Life Insurance and the Perils of Childbirth.....	127	Medical College of Pennsylvania, Woman's.....	307	Mercury, The Elimination of, during and after its Cutaneous Administration.....	267
Ligament, The Great Interosseous, between the Astragalus and the Os Calcis.....	478	Medical College, the Rush, of Chicago.....	196, 237	Message, The President's.....	634
Liquor disguised as Medicine.....	45	Medical College of the State of South Carolina.....	303	Metatarsal Bones, Extirpation of the, for Bunion.....	671
Lister, Professor.....	439	Medical College, Southern.....	287	Metritis, Dissecting.....	365, 584
Listerino.....	140	Medical College, Starling.....	304	Metritis, Exfoliative.....	110
Litholapaxy.....	132, 616	Medical College, St. Louis.....	296	Micro-organisms, The Relation of, to Tuberculosis.....	449
Lithotomy, Suprapubic.....	726	Medical College of Virginia.....	309	Microscope Slide, An Improved.....	277
Livingston, The Late Dr. Beverley.....	357, 497	Medical College, Woman's, of Chicago.....	288	Midwifery, College of.....	325
Locomotor Ataxia, The Loss of Tendon Reflex, not simply its Absence, the Significant Sign in.....	599	Medical College, Woman's, New York.....	303	Midwives in France, The Encroachments of.....	43
Locomotor Ataxia, the Relief of, Division of the Meatus Trinaris for.....	448	Medical College, The Woman's, of the New York Infirmary.....	522	Migraine, The Treatment of.....	166
London, Attacks from.....	519	Medical Colleges, The Illinois State Board of Health's Requirements of.....	139	Migraine, The Treatment of.....	544
Louisville, Medical News, The.....	130	Medical Colleges, The, of the United States and Canada.....	281	Migraine, Note on the Treatment of.....	546
Lunacy, Health, and Charity, The Massachusetts State Board of.....	14, 97, 157	Medical Congress, The International, of 1884.....	135, 642, 647	Migraine, Note upon the Treatment of.....	546
Lunatic Asylum, Brutality in a.....	71	Medical Corps, the Army, Medical Data for.....	96	Milk Company, The Orange County Farmers'.....	666
Lunatics, The Commitment of.....	72	Medical Corps, the Naval, The Scientific Work of.....	155	Milk Supply, The, in Large Cities.....	415
Lung, A Collapsed and Hypertized.....	276	Medical Department of Arkansas Industrial University.....	281	Miller, W. F., French Brandy.....	650
Lung, A Phthisical, the Seat of Perforation.....	414	Medical Department of the University of Denver.....	255	Mistake, A Nurse's.....	320
Lupus Erythematosus, The Value of a Lotion of Sulphide of Zinc in the Treatment of.....	275	Medical Department, The, of the University of Georgetown.....	522	Mobile, Letter from.....	241
Lusk, W. O., A Lecture on Some Forms of Puerperal Hemorrhage.....	425	Medical Department of Howard University.....	256	Molluscum Contagiosum Gigaforme.....	252
Lymphatic Radicles, The, and the Capillary Blood-Vessels.....	71	Medical Department of the State University of Iowa.....	290	Monstrosity, A Remarkable.....	54
MacCormac, Sir William.....	468	Medical Department of the University of Louisville.....	291	Monti, A. A Clinical Lecture on Diseases of Children.....	509
MacCormac, Sir William. A Lecture on the Treatment of Gunshot Wounds.....	481	Medical Department, The, of the University of Vermont.....	384	Morphine, Death of a Medical Student from.....	357
McKee, C. C. Decomposed Animal Matter in Water Used for Drinking and Domestic Purposes for fully Two Weeks or Longer, without any Deleterious Effects, by a Garrison of at least Eighty Souls.....	484, 70	Medical Department of Yale College.....	285	Morphine Poisoning, A Remarkable Case of.....	479
Magical Medicine in Michigan.....	70	Medical Education in America and in Great Britain.....	382	Mortality among Convicts, The.....	87
Magnetism and Electricity, A Review Lecture on.....	453	Medical Education, Higher.....	415	Mortality Returns, The Connection.....	157
Malaria at Rhinebeck.....	665	Medical Examinations, Compulsory.....	730	Motor Localizations, The Doctrine of, in the Cortex of the Cerebral Hemispheres of Man.....	645
Malarial Diseases in Connecticut.....	45	Medical Examiners in Connecticut.....	15, 126	Mouth and Foot Disease, the, An International Aspect of.....	181
Malpractice, An Alleged Case of.....	212	Medical Exhibiting, An International.....	480	Munde, P. F., Can Cancer of the Penis be Acquired by Inoculation from Cancer of the Cervix Uteri?.....	457
Malpractice Case, The Hunter Alleged.....	268	Medical Journal, A Daily.....	439	Muscle, the Tensor Tympani, The Morphology of.....	619
Malpractice, An Unfounded Charge of.....	324	Medical Journal, The British.....	711	Myopia, The Etiology of.....	533
Mania, Acute, relieved by Anti-syphilitic Treatment.....	159	Medical Journalism, The Pittsburgh.....	666	Myo-fibroma of the Optic Nerve.....	53
Mann, Matthew D. Solid Tumors of Both Ovaries, with a Fibroid Polypus of the Uterus. Diagnosis with the Aid of the Microscope. Removal of both Tumors with the Uterus.....	4	Medical Journalism, The Amenities of.....	223	Myo-sarcoma of the Axilla.....	365
Marey, Henry O. Professor Ercolan's Recent Investigations of the Placenta.....	88, 120	Medical Journalism, The Relations of, to Higher Medical Education in America.....	415	Naphthol—its Medicinal Uses and Value.....	501
Marey, H. O. Hydatidiform Degeneration of the Placenta.....	397	Medical Legislation in Ohio.....	551	Naphthol in the Treatment of Skin Diseases.....	479
Marine-Hospital Service.....	196, 508	Medical Legislation in Virginia.....	632	Naphthol, Experiments in the Use of.....	271
Married.....	130	Medical Library and Museum, The Army.....	522	Nasal Nerve, The Elongation and Stretching of them.....	417
Marsh, Professor O. C., of Yale College.....	98	Medical Matters in Canada.....	549	Nasal Nerve, The Elongation of the External.....	418
Marshalltown Medical Review," The.....	214	Medical Metropolis, The, of the United States.....	609	Nasal Septum, Anatomical Researches on the Deviation of the.....	55
Martin, Professor H. Newell, of the Johns Hopkins University, Baltimore.....	157	Medical Pleasure Party, A.....	97	National Economy and Public Health, Trichiniasis in Its Relation to.....	116, 235
Masculine False Hermaphroditism, A Case of, in a Child.....	315	Medical Practice Act, the, An Arrest under.....	581	Navy, The Health of the.....	164
Massage, The Risks of.....	214	Medical Practice Act, A Conviction under the.....	549	Naval Intelligence.....	28, 56, 84, 112, 140, 168, 196, 224, 252, 280, 312, 340, 368, 396, 424, 452, 480, 508, 564, 592, 620, 648, 672, 704, 730
Mastoid Cells, Chronic Inflammation of the, without Perforation of the Membrana Tympani.....	106	Medical Practice and State Boards of Health.....	690	Navy, The Medical Corps of the, and the American Medical Association.....	7
Mastoid Disease, Cases of; Artificial Perforation of the Bones; Temporary Relief; Death from Pyæmia.....	105	Medical Practice Law, Proceedings under the.....	44	Navi, The Treatment of.....	675
Mastoid, External and Internal Inflammations of the, with Cases.....	105	Medical Practice, The Regulation of, and the Plea of Persecution.....	495	Necrosis of the Inferior Maxilla; Sequestromy, Foreign Body, Removal of, from the Pleural Cavity.....	491
Mastoid, Hemorrhage following Trephining of the.....	248	Medical Profession, The Status of the, in the State of New York.....	372, 568	Necrosis of Both Tibiæ; Removal.....	658
Mastoiditis following Diptheria.....	523	Medical Publication Dispute, A.....	183	Nephrectomy by Laparotomy.....	691
Maxilla, the Superior, Osteoplastic Excision of.....	73	Medical Register, The, for New England.....	658	Nephritis, Acute, in an Infant.....	277
Measles, A Malignant Outbreak of.....	534	Medical Reporter, The Iowa State.....	97	Nephritis, Diptheritic.....	450
Measles complicated with Capillary Bronchitis.....	534	Medical School, A New, at Beirut.....	357	Nerve, the Spinal Accessory, Excision of a Portion of, for Spasmodic Torticollis.....	555
Measles followed by Typhoid Fever.....	362	Medical School, Harvard.....	293	Nerve Fibers in the Brain, Upon the Course of the, which preside over the Contraction of the Pupil, and the Localization of a Center for the Iris and for the Contraction of the Ocular Muscles.....	20
Meat, Powdered, The Administration of.....	506	Medical School, the New York Post-graduate.....	151, 452	Nervous Affections in Children, A Clinical Lecture on Some.....	705
Medical Association, the American, The Journal of Medical Association, The British.....	97	Medical School, Trinity.....	243	Neuralgia, The Differential Diagnosis of the Douloureux and Dental.....	729
Medical Association, The Lehigh Valley.....	143	Medical Service, The British Passenger Steamship Medical Societies, County, An Open Letter to, in the State of New York.....	129, 255	Neurological Work in America.....	673
Medical Association, The Pennsylvania and Maryland Union.....	268	Medical Societies, The, and Army and Navy Surgeons.....	14	Neuromata, False.....	74
Medical Association, The Tri-State.....	56	Medical Society, The Monmouth County, N. J.....	354	Nero-Retinitis, Sympathetic.....	100
Medical Attendance on Jurymen.....	634	Medical Society, the New Haven County, An Expansion from.....	497	Neuro Retinitis, Sympathetic, occurring during Pregnancy.....	131
Medical Bill, The Erie County.....	356	Medical Society, The, of the County of New York.....	439, 470, 666	Neurosis, Reflex.....	75
Medical Bill, The Erie County Society's.....	579	Medical Society, A New, in Orange, N. J.....	693	Newspaper Notoriety.....	43
Medical Biography, A New.....	692	Medical Society, The St. Louis.....	45, 112	Nickel, the Salts of, The Medicinal Value of.....	451
Medical Books, The Appeal to, in Courts.....	224, 357	Medical Society, The Tri-State.....	223	Nitrite of Sodium.....	618
Medical Climatology, A Society of.....	323	Medical Society, The, of the County of Westchester "Medical Student," The.....	439, 496	Nitrosi, Spiritus Ætheris.....	562
Medical Club, The Philadelphia.....	535	Medical Students, Chinese.....	73	Notched Teeth.....	175
Medical Clubs, The, in Buffalo.....	440	Medical Students, The Comfort of.....	647	Noisance, An Alleged, at Glen Cove.....	384
Medical College, A New.....	157	Medical Students' Summer Work.....	69	Noisance, The Ashes and Garbage.....	218
Medical College, The New, in Buffalo.....	383	"Medical Times," The "Philadelphia".....	357	Noisances, The Hunter's Point.....	97, 357
Medical College of Alabama.....	281	Medical Tramps in Boston.....	691	Noisances, The Long Island.....	608
Medical College, Albany.....	299	"Medical World," The.....	412	Nurses, The Boston City Hospital Training School for.....	278
Medical Colleges, The Alleged Persecution of.....	150	Medicine, Authority in.....	94	Nurses, The Training of, in Pennsylvania.....	97
Medical College, The American, of St. Louis.....	185	Medicine, The Paris Academy of.....	157	OBITUARY NOTES:	
Medical College, The American, of St. Louis, and the State Board of Health of West Virginia.....	555	Medicine, Faculty of, University of Bishop's College.....	284	Archambault, M., of Paris.....	130
Medical College, Atlanta.....	287	Medicine, The Paris Faculty of.....	497, 608, 720	Ayrton, Mrs. Matilda C. M. D.....	242
Medical College, The Baltimore.....	157, 293	Medicine, A Preparatory School of.....	607	Baldwin, Dr. James, of Danbury, Conn.....	130
Medical College, Bellevue Hospital.....	300	Medicine, Teachers of, as State Examiners.....	632	Barnes, Edward F. M. D., of Claremont, N. H.....	268
Medical College, Cooper.....	281	Medicine, The Toulouse School of.....	157	Baum, Professor, of Göttingen.....	413
Medical College, Dartmouth.....	130, 151, 298, 549	Medico-Chirurgical College of Philadelphia.....	308, 357	Bell, Benjamin, F. R. C. S., Edinburgh.....	45
Medical College of Evansville.....	259	Medico-Chirurgical Journal, The Bristol.....	97	Bell John, M. D., of Chester, N. H.....	609
Medical College, Halifax.....	283	Medico-Legal Society, The.....	268	Bostwick, Homer, L. M. S. S. N. Y.....	215
Medical College, Jefferson.....	307, 440	Medico-Legal Society, the New York, The Presidency of.....	609	Calhoun, The Rev. Charles W., M. D., of Syria.....	73
Medical College, Louisville.....	292	Melancholia, On Causes of.....	171, 202	Caradee, M., of Brittany.....	268
Medical College, Miami.....	305	Melancholia and Mental Depression with Sleeplessness, Cannabis Indica in.....	139	Cipriani, Professor Eudilio.....	45
Medical College, Missonri.....	296	Melanoma of the Iris.....	22	Colucciatti, Professor, of Turin.....	84
Medical College, Nashville.....	308	Melano-sarcoma of the Orbit.....	276	Cortese, Professor Francesco.....	609
Medical College, National, Medical Department of Columbian University.....	285	Memorial, A, of Frederick D. Lente, A. M., M. D.....	587	Cox, E. Gover, M. D., of Baltimore.....	215
Medical College of Ohio.....	804	Meningitis, A Lecture on the Treatment of.....	141	Crane, Surgeon-General, of the Army.....	412
Medical College, Omaha.....	297	Meningitis, Acute, A Lecture on.....	677	Curtis, Josiah, M. D.....	184

OBITUARY NOTES:		PAGE			PAGE
Edgecomb, Arthur D., M. D., of Lancaster, Mass.	215		Ovaries, Tait's Operation for the Removal of the	161	
Ellis, Calvin, M. D., of Boston	698		Ovariectomy	613	
Ercolani, Professor	693		Ovariectomy in Old Age	614	
Fagge, Dr. Hilton, of London	694		Ovary, Cystic Tumor of the	366	
Filhol, Professor, of Toulouse	130		Ovum, Birth of an Unruptured, at Term	26	
Fisher, G. W., M. D., of Baltimore	98		Oxygen, the Inhalation of, Two Cases of Poisoning with Illuminating Gas successfully treated by	145	
Fleming, James A., M. D., of Boston	884		Oysters, Green	536	
Gignoux, John Francis, M. D.	497		Paget, Sir James, on Recreation	591	
Gilman, Judson, M. D., of Baltimore	157		Paget's Disease of the Nipple	80	
Hawn, E. N., M. D., of Indianapolis	326		Paget's Disease, or Malignant Papillary Dermatitis	272	
Jerome, J. H., M. D., of Saginaw City, Mich.	326		Pain, The Relations of to Weather, Studied during Eleven Years, of a Case of Traumatic Neuralgia	215, 245	
Kemp, Alba E., M. D., of East Douglas, Mass.	498		Papillitis in Sympathetic Ophthalmitis, On the Frequency of	21	
King, Assistant Surgeon William Howard, of the Army	242		Papillo Sarcoma of the Penis; Enucleation and Plastic Repair	110	
Kirkbride, Thomas S., M. D., of Philadelphia	693		Paraldehyde as a Hypnotic, Note on	672	
Le Conte, John Lawrence, M. D., of Philadelphia	581		Paraplegia, Enteric	669	
Leute, Frederick D., M. D., of Cold Spring	439		Parker, The Health of Dr. Willard	665, 692	
Lidell, John A., M. D.	45		Paralysis of the Associated Movements of the Eyes	52	
Livingston, Beverley, M. D.	15		Paralysis in Connection with the Loss of a Limb	72	
Loomis, Dyer, M. D., of New Berlin, N. Y.	498		Paralysis, Lead	74	
Lord, Friend D., of Newton Lower Falls, Mass.	666		Paralysis, Syphilitic	363	
Maxwell, Richard T., M. D., of San Francisco	45		Partridge, Edward L., On One of the Dangers that may arise after Tracheotomy	9	
Mead, Edward, M. D., of Boston	157		Patellar Intertion, A Case of Bilateral Separation of the Extensor Tendons from the	714	
Meade, Marshall S., M. D., of Northfield, Mass.	551		Pathology, The, of Acute Lobar Pneumonia from a New Standpoint	123, 205, 231, 256, 377, 399, 485, 512, 594	
Mixer, Sylvester K., M. D., of Buffalo	326		Pathology, Comparative, Some Notes on, Cancer in Domesticated Animals	659	
Mosher, Jacob S., M. D., of Albany	184		Pauper Lunatics in the State of New York	692	
Musser, Benjamin, M. D., of Strasburg, Pa.	73		Pediatrics, A New Journal of	72	
Owen, Surgeon Alfred M., of the Navy	242		Peat as an Absorbent Dressing for Wounds	523	
Pacini, Professor, of Florence	157		Pedunculated Bony Growth in the External Auditory Canal, the Result of Long-continued Suppuration; Removal by Snare; Microscopic Examination	54	
Parrot, Professor, of Paris	215		Pelvic Sarcoma	366	
Patchin, Milligan, of Paris	98		Peis, Can Cancer of the be Acquired by Inoculation from Cancer of the Cervix Uteri?	457	
Phinney, Erasmus O., M. D., of Melrose, Mass.	45		Penis, Two Cases of Amputation of the, with Transplantation of the Urethra into the Perineum, on account of Epithelioma	576	
Praet, Jefferson, M. D.	15		Pension, M. Pasteur's	130	
Ridgely, N. G., M. D., of Baltimore	157		Pepper, William, A Clinical Lecture on Exophthalmic Goitre	59	
Rauzer, W. B., M. D., of Cleveland	98		Pericardium, Calcified; Double Mitral Disease	532	
Scott, Thomas F., M. D., of Petersburg, Va.	73		Perimeter, the, A Mode of Illuminating	532	
Scott, W. E., M. D.	15		Perineal Laceration, A Study of the Aetiology of, with a New Method for its Proper Repair	330	
Semig, Bernard G., M. D., Assistant Surgeon United States Army	130		Perineorrhaphy	506	
Sims, J. Marion, M. D.	550		Perineum, Two Cases of Amputation of the Penis with Transplantation of the Urethra into the, on account of Epithelioma	576	
Smith, J. Lawrence, M. D., of Louisville	468		Perineum, Female, A Clinical Lecture on Anatomical Lesions of the	29	
Stewart, Alexander Patrick, M. D., F. R. C. P.	184		Peristalsis, Intestinal	169	
Trask, James Dowling, M. D., of Astoria, N. Y.	208		Peritonæum, An Enormously Thickened	276	
Tucker, George G., M. D., of Westfield, Mass.	215		Peritonitis from Intestinal Perforation	416	
Van Hunevel, M., of Belgium	184		Perityphlitis with Obscure Symptoms	642	
Wakefield, Horace Poole, M. D., of Leicester, Mass.	242		Persecution, The Alleged, of Medical Colleges	180	
Woods, Benjamin W., M. D., of Govanstown, Md.	215		Personal Resemblance as a Test of Parentage	224	
Wright, Charles, M. D.	208		Pessaries, Vulcanized, from Plaster-of-Paris Casts	684	
Zitzer, John J., M. D., of Baltimore	498		Peters, J. C., The So-called Pink Eye and Horse Scarlet Fever	657	
Obstetrical Forceps, the, A New Material for	356		Petrone Bone, Case of Fracture of the	54	
Obstetrical Society, The New York	434		Pharmacopæia, The New	497	
Occhipito-posterior Position	250, 561		Pharmacy, American, in Europe	478	
Ocular Therapeutics, Notes on	190		Philadelphia, Letter from	408	
Odontological Society, The American	72		Phlegmasia Alba Dolens, The Influence of the Lymphatic Gland in the Crural Canal on	82	
Edema, Cutaneous, Acute Circumscribed	449		Phthisis, The Pathology of, and its Laryngeal Complications	524	
Edema as a Symptom of Phlebitis and Thrombosis of the Lateral Sinus	619		Phthisis, Powdered Meat in the Treatment of	56	
Olecranon Bursa, Thrombus of the	173		Phthisis, Pulmonary, Oleum Lini in the Treatment of, and other Wasting Diseases	506	
Oophorectomy	137, 589, 618, 698		Phthisisphobia	718	
Operation, A New, for the Reduction of Chronic Inversion of the Uterus	577		Physician, An Aged	340	
Operations, Three Cases of Extensive Bloody, on the Face	456		Physician, An Attack on a	412	
Ophthalmia, Granular, and Jequirity	420		Physician, A Connecticut, in Disgrace	215	
Ophthalmia, the Jequirity, On the Nature of	531		Physician, A Female, in Rome	157	
Ophthalmic Operations, The Employment of Nitrous Oxide as an Anæsthetic in	101		Physician, a Serious Charges against	96	
Ophthalmoplegia Externa, Two Cases of, associated with Disease of the Optic Nerves from Brain Tumor, with an Account of the Post-mortem Examination	131		Physician, A shot for refusing his Services	242	
Ophthalmoplegia Externa, Two Cases of, associated with Disease of the Optic Nerves from Brain Tumor, with Autopsy	148		Physicians, The Number of, in America	438	
Optum Smoking	549		Physician, The Singular Death of a	184	
Oppenheimer, W. T., A Case of Foreign Body in the Rectum	715		Physicians, Philadelphia	326	
Optic Nerve, Axial Atrophy of, the observed in Several Members of the Same Family	24		Physicians and Sanitation	548	
Optic-nerve Fibers in the Optic Chiasm of Man, the Semi-decussation of the, Contribution to the Literature of	420		Physicians and Sanitation	692	
Optic Nerves, Disease of the, from Brain Tumor, Two Cases of Ophthalmoplegia Externa associated with, Autopsy	148		Physiology, A Lecture on the Physical Basis of	197	
Optic Nerves, Lesions of the, in Cranial Deformities	24		Physiology, The, of Sleep	210	
Orethritis, Tubercular	659		"Physio-medicalism"	213	
Orthopaedic Surgery, Lectures on	507		Physometra	589	
Osler, Dr. William, of Montreal	357		Pinel, H. G., The Status of the Medical Profession in the State of New York	372, 568	
Osler, Professor, of McGill University, Montreal	157		Pinel, A Statue of	549	
Osteosarcoma of the Lower Jaw	611		Pink Eye, The So-called, and Horse Scarlet Fever	657	
Otitis Media, Obstinate Purulent Exsplanative	106		Piscidia Erythrina as a Substitute for Morphine	478	
Otological Congress, The Third International	17		Placenta, Professor Ercolani's Recent Investigations of the	88, 120	
Ott, Isaac, Intestinal Peristalsis	169		Placenta, the, Hydatidiform Degeneration of	397	
Ovarian Cyst with Limpid Fluid, simulating a Cyst of the Broad Ligament	46		Placenta Lateralis, A Successful Case of	599	
Ovarian Cyst, Strangulation of an; Rapid Decomposition of the Contents	360		Placenta, Retention of the, as a Safeguard against Secondary Hemorrhage from Atony of the Uterus	703	
Ovarian Cystoma communicating with the Rectum	612		"Planet," The	580	
Ovarian Tumors, Two, One of them of Doubtful Character	191		Plant, W. T., A Lecture on Acute Meningitis	677	
Ovarian Tumor treated by Partial Removal and Drainage	612		Pledge, The, exacted at Cleveland	56	
Ovaries, Solid Tumors of both, with a Fibroid Polypus of the Uterus,—Diagnosis with the Aid of the Microscope. Removal of both Tumors with the Uterus			Pleuro-pneumonia	15	
			Pleuro-pneumonia, Contagious, among Cattle in Connecticut	213	
			Pleuro-pneumonia, Contagious, on Staten Island	156	
			Pleuro-pneumonia in Pennsylvania	325	
			Pleuro-pneumonia, The Staten Island Epidemic of	43, 73	
			Pneumonia, The Pathology of Acute Lobar, from a New Standpoint	123, 205, 231, 256, 377, 399, 485, 512, 594	
			Pneumonia, Metastatic, following a Pistol-shot Wound of the Temporal Bone	222	
			Pneumopyothorax,—Thoracentesis	492	
			Poisoning, Carbonic-oxide, Refusion in	625	
			Poisoning with Confectionery	364	
			Poisoning with Illuminating Gas, Two Cases of, successfully treated by the Inhalation of Oxygen	145	
			Poisoning, A Case of, by Sulphate of Iron	401	
			Polk, William M., The Indications for Hysterectomy	201	
			Polyemic, The, A New Journal	493	
			Polyemic, The New York	507, 522, 549	
			Polycope, A Simplified	509	
			Pooley, J. H., Thrombus of the Olecranon Bursa	178	
			Port, American	693	
			Port, American, in Spain	97	
			Porro Operation, The	164, 436	
			Porro's Operation, A Case of, in Philadelphia	14	
			Porro-Müller Operation, The	16	
			Post, A. C., Three Cases of Extensive Bloody Operations on the Face	456	
			Powders for Application to the Eye	131	
			Practitioner, An Unqualified, in Harlem	438	
			"Practitioners of Physic and Surgery," Report of the Committee on Legislation, embodying a Draft of "An Act to Establish the Medical Faculty of the University of the State of New York, and to Regulate the Licensing of"	336	
			Prague, The University of	45	
			Preparations, The Formation of, in Mixtures of Different Tinctures	223	
			Pregnancy and Carbon Monoxide	340	
			Pregnancy, Extra-uterine	417	
			Pregnancy with Fibrous Tumors of the Uterus	613	
			Pregnancy, Interstitial	332	
			Pregnancy, The Vomiting of	560	
			Pregnancy, The Vomiting of, A New Remedy for	561	
			Presentation, A Spina Bifida	161	
			Priestley, Joseph, Mementos of	73	
			Principles, Do Moral, change with Time?	240	
			Prismatic Glasses, A Personal Experience with	100	
			Prisms, The Apparent Curvature of Surface Produced by	100	
			Prize, Annual, The County Medical Society's	521	
			Prize, The Astley-Cooper Triennial	157	
			Prize, Botanical, The de Candolle	550	
			Prize, The Bufalini	156	
			Prize, The Riberi	130	
			Process, The Trachomatous	529	
			Professional Appointments, Politics in	43	
			Profession, Personal Repute in the	94	
			Prone Position, The, for the Administration of Anæsthetics	563	
			Prostate, Enormous Enlargement of the	365	
			Psoriasis affecting the Palms	273	
			Psoriasis, Pseudo, of the Palm	273	
			Psychiatry, The Study of	493	
			Psychical Disturbances without Apparent Cause	193	
			Psychological Journal, The American	214	
			Ptosis and Bliopia following the Administration of Gelsemium	32	
			Public Health and National Economy, Trichiniasis in its Relation to	116, 235	
			Puerperal Convulsions	586, 614	
			Puerperal Eclampsia, The Behavior of the Uterus in	26	
			Puerperal Eclampsia, Death from	615	
			Puerperal Fever	665	
			Puerperal Fever, The Prevention and Treatment of	649	
			Puerperal Fever; the Vaginal and Uterine Douche	249	
			Puerperal Hemorrhage, some Forms of, A Lecture on	425	
			Puerperal Infection, The Prevention of		
			Puerperal Septicæmia, A Case of	346	
			Purpura	673	
			Pyæmia, Acute, following the Passage of a Sound	671	
			Pyæmia, Acute, of Urethral Origin	697	
			Pyrethrum Powder	280	
			Quackery in West Virginia	326	
			Quackery and Small-pox in St. Paul	181	
			Quackery, The Suppression of	468	
			Quacks, The Illinois Method of Dealing with	213	
			Quain's Dictionary of Medicine	252	
			Quarantine, The, of Cattle	634	
			Quarantine, The Chesapeake Bay	156	
			Quarantine, An Evasion of	324	
			Quarantine, The, on the Mexican Frontier	634	
			Quarantine, A Partial, of Cargoes	182	
			Quarantine, The Question of	211	
			Quarantine, A Rag, in Boston Harbor	182	
			Quarantine Station, The New, on Chesapeake Bay	127	
			Quarantine System, Our	580	
			Quassia Amorphous	250	
			Quindino and its Allies	506	
			Quinine, The Action of, upon the Ear	54	
			Quinine, The Administration of	590	
			Quinine Lozenges	366	
			Quinine, The Oxytocic Action of	28	
			Quinine, The Use of, in the Diseases of Children	138	
			Quinine, Sulphate of, The Presence of, in Sulphate of Cinchonine; the Extraction of Sulphate of Quinine from Cinchona Bark	505	

	PAGE		PAGE		PAGE
Râles, The Origin of Crepitant and Sub-crepitant.	8	Septicæmia, the Contagium of, The Action of Heat on.	699	Syphilis, On the Peculiar Appearances of the Initial Lesion of, at the Earliest Period of its Development.	274
Ranney, Ambrose L. A Diagrammatic Summary of some of the Principal Features of Cerebral and Spinal Architecture.	36	Septicæmia, Puerperal.	361	Syphilitic and Non-syphilitic Affections of the Skin, A Study of the Coincidence of.	274
Ranney, A. L. The Cerebral Cortex.	313, 341	Septicæmia, A Case of Puerperal.	346	Syringe, A New Hypodermic.	353
Raphael, H. Cases in Genito-urinary Practice.	431	Septum Nasal, Traumatic Deviation of the.	348		
Raphael, H. A Case of Tubercular Syphilide of the Face.	459	Sewer Ventilation, A New Method of.	536		
Rectal Lever, Use of the.	564	Sexes, the Two, The Form of the Skull in.	494		
Reetm, A Case of Foreign Body in the.	715	Shock, A New Theory of.	704	Tabes Dorsalis, The Therapeutic Value of Nerve-stretching in.	84
Reetm, Stricture of the; Proctotomy by a New Method.	715	Sickness among Horses in Connecticut.	129	Tait's Operation.	361, 366, 612, 641
Reed, C. A. L. Vulcanized pessaries from Plaster-of-Paris Casts.	684	Sims, The Late Dr. J. Marion.	581	Tendon Reflex, The Loss of, not simply its Absence, the Significant Sign in Locomotor Ataxia.	599
Reeves, J. E. The Eminent Domain of Sanitary Science and the Usefulness of State Boards of Health in Guarding the Public Welfare.	538	Skene, A. J. C. A Clinical Lecture on Anatomical Lesions of the Female Perineum.	29	Tendon, Suture of a.	663
Refraction, Changes in, resulting from a Blow.	103	Skin, Diseases of the, Clinical Lectures on.	113, 253	Tendons, A Case of Bilateral Separation of the Extensor, from the Patellar Insertion.	714
Refraction, The Influence of College Life on.	99	Skin Diseases, On the Treatment of, by Adhesive Applications.	675	Teratoid Tumors of both Auricles, having a Clinical History of Recurrent Fibroids.	105
Refusion in Carbonic-oxide Poisoning.	625	Skull, An Unusually Thin.	672	Testicle, Wandering.	616
Remsen, C. The Use of Water in the Dietary of Young Children.	347	Skull, The Form of the, in the Two Sexes.	494	Testicle, Undescended, A Case of Strangulated Inguinal Hernia with an.	92
Renal Calculi in the New-born.	74	Small-pox.	181, 215, 325, 497	Testicles, Enlarged, A New Method of applying Pressure to.	140
Renal Calculus.	77	Small-pox, The Chicago, Mortality for the year 1882.	218	Tetanus, Serpentine-Venom as a Remedy for.	451
Report, The Annual, of the Surgeon-General of the Army.	606	Small-pox Inoculation, Modified.	691	Therapeutics, Experimental, in London.	606
Retina, The Pathogenesis of Detachment of the.	292	Small-pox, Malignant, in Mexico.	384	Therapeutics, A Point in the Progress of.	3-2
Retina, The Treatment of Detachment of the.	101	Small-pox, Mistaken Diagnosis of.	183	Thomas, T. Gaillard. A Clinical Lecture in Gynecology.	225
Retina, The Treatment of Detachment of the, by Iridectomy.	420	Small-pox, More, from the Scythia.	665	Thomas, T. Gaillard. The Prevention and Treatment of Puerperal Fever.	619
Retinal Reactions, Investigations into the Rapidity of.	419	Small-pox in Pennsylvania.	45	Thomson's Disease.	535
Retinal Thrombus, Blindness from, in consequence of Facial Erysipelas.	102	Small-pox and Quackery in St. Paul.	181	Thomsonism in a New Dress.	265
Retina, Commotio; or some of the Effects of Direct and Indirect Blows to the Eye.	131	Social Position, The Influence of, on the Death-Rate.	168	Thoracic Troubles, Lobelia Inflata in.	223
Retinitis Albescens Punctata, A Case of.	21	Society for the Prevention of Cruelty to Children, the, A Suggestion to.	267	Thrombosis, Cardiac, in Acute Diseases.	450
Retinitis Albuminaria, A Rare Case of Unilateral, observed in a Patient with but One Kidney, situated on the Corresponding Side, and the Seat of a Parenchymatous Nephritis.	53	Society, the County, The Election at.	466	Thrombus of the Olecranon Bursa.	178
Retinoscopy, The Advantages of the Plane Ophthalmoscopic Mirror in.	592	Society, The County, Nominations.	356	Thurillier, The Late Dr.	510
Reymond, Professor Du Bois.	357	Society, The, of Medical Jurisprudence and State Medicine.	693	Thymol and Corrosive Sublimate, The Use of, in Embalming.	168
Rheumatic Inflammation of the Sheaths of the Nerves and Tendons, Rhus Toxicodendron as a Remedy for.	395	Society, The Northwestern Medical and Surgical.	693	Thyroid Gland, Removal of the.	83
Rhinosecopy, Posterior.	534	Society Meetings.	28, 56, 84, 112, 140, 168, 196, 224, 252, 2-0, 340, 368, 396, 424, 452, 480, 508, 536, 564, 592, 620, 648, 676, 704, 730	Tipples, Disguised.	213
Ribs, A Case of Dislocation of the Cartilages of the Fourth, Fifth, and Sixth. Also Dislocation of the Sterna End of the Clavicle, with Dislocation of the First and Second Costal Cartilages.	34, 62	"Soothing Syrup," A Death from.	97	Tobacco Law, The New Jersey.	15
Rinderpest.	581	Sound, On the Intermittent Perception of, as conveyed through the Air and Cranial Bones, with a Brief Summary of the Results of Treatment in Chronic Aural Affections with Impaired Hearing.	104	Tongue, Excision of the.	534
Roberts, A Reception to Dr. M. Josiah.	720	Sound, The Significance of the Transmission of, to the Ear, through the Tissues in Aural Disease.	106	Tongue, the Entire, the Submaxillary and Sublingual Glands and the Lateral Wall of the Pharynx, Removal of, by Kocher's Method; Cure Tonic Spasm of the Trapezinus Muscle of Malarial (?) Origin.	629
Robinson, B. Some Critical Remarks in regard to the Use of Antipyretic Agents in Typhoid Fever.	574	Spine, the, A Case of Injury of.	472	Tooth, A Carious Malposition of a.	728
Rubber Coil, The, and Other Matters.	326	Spina Bifida treated by Injection.	534	Tooth, A, removed from the Antrum of Highmore.	582
Ruptures, Cervico-vaginal, in their Obstetrical forensic Significance.	134	Spina Bifida, Talipes Calcanei.	77	Torticollis.	77
Russian Vapor-Baths a Cure for Blood-Poisoning.	601	Spinal and Cerebral Architecture, A Diagrammatic Summary of some of the Principal Features of.	36	Trachelorrhaphy, Tenaculum-Scissors for.	360
Salicylic Acid, Collapse from.	366	Spinal Cord, the, Effect of Metallic Poisons on.	424	Tracheotomy.	416
Sanitarians, A Quarrel among.	690	Spinal Curvature, The Treatment of, by Reclination in its Early Stages.	82	Tracheotomy in Diphtheria.	277
Sanitary Condition, The, of the Mississippi Valley.	350	Spinal Disease, A Case of, pursuing a somewhat Unusual Course.	447	Tracheotomy for the Extraction of a Tooth from the Left Bronchus, with Remarks on Foreign Bodies in the Air-passages.	404
Sanitary Condition, The, of Philadelphia.	129	Spinal Meningitis.	75	Tracheotomy, On one of the Dangers that may arise after.	9
Sanitary Condition, The, of the Public Schools.	634	Spleen, Enlargement of the.	366	Trachoma of the Conjunctiva, The Treatment of.	52
Sanitary Condition, The, of the State Camp.	42	Splenio Infarction followed by Abscess.	414	Tragedy, The Recent, at the Norristown Lunatic Asylum.	180
Sanitary Condition, The, of Yale College.	666	St. Louis, Letter from.	409, 546	Transactions of the Obstetrical Society of London.	153
Sanitary Conference, The, at Rome.	508	State Board of Health, The, of West Virginia.	28	Trapezius Muscle, Tonic Spasm of the, of Malarial (?) Origin.	629
Sanitary Convention, A.	522	Stearns, H. P. Insanity: its Causes and Prevention.	11	Treatment, the, of Irreducible Hernia, by Operation, Remarks on.	680
Sanitary Corps, The Texas, of Last Summer.	81	Stenosis of the Pulmonary Orifice of the Heart.	590	Tremor, Veratrine as a Remedy for.	250
Sanitary Corps, The Summer.	44, 98	Sterility, The Moral Aspect of Enforced.	69	Trephining for Diffuse Osteo-Periostitis.	725
Sanitary Council, The, of the Mississippi Valley.	182	Stone in the Female Bladder associated with Fistulous Connection with the Bowels.	163	Trephining, Prehistoric.	647
Sanitary Council, The, of the Mississippi Valley, and the Louisiana State Board of Health.	242	Stillman, C. F. A Contribution to the Treatment of Club-Foot.	429	Trichiniasis.	468
Sanitary Institute, The, of Great Britain.	558	Stomach, Ulceration of the; Death from Hamorrhage; Obscure Symptoms.	671	Trichiniasis and American Pork.	619
Sanitary Science, The Eminent Domain of, and the Usefulness of State Boards of Health in Guarding the Public Welfare.	538	Strabismus, Excessive Unilateral.	418	Trichiniasis, An Outbreak of.	549
Sanitary Science, The Recent Advances of; the Relations of Micro-organisms to Disease.	415	Students' Number, Our.	256	Trichiniasis in its Relation to Public Health and National Economy.	116, 235
"Sanitas," The Absorbent Pad.	479	Sublingual Cyst.	366	Trinity College, The Alumni Association of.	15
Sanitation and Physicians.	548	Suicide of a Physician.	45	Tubercular Disease, Recurrent, of the Wrist; Amputation; Operation for Peripleuritic Abscess.	111
Sarcoma of the Choroid and Vitreous Body.	409	Suit, A Libel.	720	Tubercular Syphilide of the Face, A Case of.	459
Sarcoma of the Internal Region of the Left Eyelid; Exstirpation; Autoplasty.	421	"Sulfurine," or Crystallized Liver of Sulphur, for Odorless Sulphur Baths.	478	Tubercular Syphilide, The Polymorphous Changes Observed in.	273
Sarcoma, Pelvic, limited to the Cellular Tissue.	46	Sulphate of Cinchonidine, The Dnty on.	184	Tuberculosis, Miliary.	449
Sarcoma of the Sternum.	671	Sulphodinitrobenzol as a Test for Bilirubin.	730	Tumor of the Abdomen.	365
Sarcoma of the Uterus, Cases of.	65	Sulphur, The Fumes of, in the Treatment of Catarrh.	112	Tumor, A, Composed of Military Tubercles of the Subcutaneous Adipose Tissue connected with one of the Anterior Cutaneous Branches of the Lumbar Nerves.	163
Sarcoma, Spindle-celled, of the Lower Jaw.	723	Summer, T. S. Russian Vapor-Baths a Cure for Blood-Poisoning.	601	Tumor, Fatty, of the Forehead, with Apparent Fluctuation.	696
Scarlatina, Equine, On the So-called.	514	Surgeon-General, the, of the Army, The Annual Report of.	606	Tumor, Fatty, of the Shoulder.	493
Scarlatina, Malignant (Haemorrhagic), Crotalus as a Remedy for.	194	Surgeon-General, The New, of the Army.	607	Tumor, Pulsating, of the Orbit, followed by a Cure.	22
Scarlet Fever, Horse, and the so-called Pink Eye.	657	Surgeon-General of the Navy, The Status of the.	240	Tumors of the Stomach.	194
School, A Preparatory, of Medicine.	607	Surgeons, Army and Navy, and the Medical Societies.	14	Turpentine in Secondary Syphilis and in Phagadenic Sores following Fever.	646
School of Medicine, Kentucky.	291	Surgeons, Prizes for French Army.	43	Tympanum, the, Pyæmic Attacks and Acute Purulent Inflammation of.	619
School of Medicine, Toronto.	283	Surgical Appliances, Special, for Disabled Soldiers and Sailors.	278	Typhoid Fever.	325
Schuyler, W. D. The Pathology of Acute Lobar Pneumonia from a New Standpoint.	123, 205, 231, 256, 377, 399, 485, 512, 594	Surgical Cases, Six, treated in the Medical Missionary Society's Hospital.	91	Typhoid Fever, Cold Baths in.	251
Scientific Work, The, of the Naval Medical Corps.	155	"Surgical News, The."	693	Typhoid Fever conveyed by Milk.	549
Scrofulides in Children, Treatment of.	812	Surgical Operations, The Importance of Cleanliness in.	510	Typhoid Fever in New York.	532
Scrofulous Degeneration of the Glands of the Neck.	661	Surgical and Orthopedic Instrument Makers, Congress of.	459	Typhoid Fever and the Orange County Dairymen.	608
Sensitiveness, Acetate of Morphine Hypodermically for.	423	Sutton, R. S. The Importance of Cleanliness in Surgical Operations.	510	Typhoid Fever, Perchloride of Iron in the Treatment of.	223
Sensitiveness; its Prevention and Relief.	138	Swinburne, Dr. John.	15	Typhoid Fever, Perforation of the Intestines in.	276
Sensitiveness, The Prevention and Cure of.	367	Synovitis, Traumatic Destructive, of the Foot; Disease of the Metatarsal Bones; Failure of Excision; Amputation of the Leg.	491	Typhoid Fever, The, at Port Jervis.	665
Semilunar Canals, A New Theory as to the Functions of the.	106	Syphilide, Tubercular, of the Face, A Case of.	459	Typhoid Fever, The Prevalence of, in New York.	353
Sense, A Seventh.	506	Syphilitic Disease of the Rectum.	644	Typhoid Fever, A Real Form of.	112
		Syphilis, The Communicability of, to Animals.	252	Typhoid Fever at Rye Beach, N. H.	241
		Syphilis, Laryngeal.	75	Typhoid Fever, Sewer Gas and its alleged Causation of.	18
				Typhoid Fever, The Use of Antipyretic Agents in, Some Critical Remarks in regard to.	574
				Typhoid Perforation of Intestine.	584
				Typhus.	106

	PAGE		PAGE		PAGE
Ulcer of the Stomach, A very Large, with Unusual Features	442	Uterine Fibroids, Disappearance of, during Pregnancy	614	Vermiform Mucous Discharge from the Rectum ..	394
Ulceration, Multiple Cachectic, A Case of	271	Uterine Fibroids, Double Enucleation of	183	Vesico-vaginal Fistulae, Three Stubborn Cases of, successfully treated after the Operation without the Use of the Catheter	190
Ulcers, Deep, of the Cornea, and their Antiseptic Treatment	23	Uterine Irritation and Uterine Movement	186	Veterinary Association, The Pennsylvania State ..	252
Umbilical Cord, An Anomaly of the Stump of the ..	193	Uterine Mucous Membrane, The Condition of the, during Menstruation	560	Veterinary Hospital, The American	182
Umbilical Cord, Knotted	333	Uterine Mucous Membrane, The State of the, during Menstruation	135	Veterinary Hospital, The Harvard	73
Umbilical Phlebitis	414	Uterine Myomata, The Development of	137	Veterinary Medical Society, The, of the State of New York	497
University, The, of Berlin	242, 693	Uterus, Absence of the	416	Vienna, Letter from	209, 381, 605, 688
University of Buffalo, Medical Department of the ..	300	Uterus, Antelexion of the	57	Virechow, An Attempt to Discipline	183
University, The, of Dublin	439	Uterus, Backward Displacements of the, A Clinical Classification of	126	Visual Field, the, Limits of, The Representation of the	422
Universities, The German	268	Uterus, the Cancerous, Extirpation of	589	Visual Illusions	529
University of Louisiana, Medical Department of the ..	292	Uterus, Chronic Inversion of the, A New Operation for the Reduction of	577	Vulcanized Pessaries from Plaster-of-Paris Casts ..	684
University of Maryland, The	72	Uterus, Is Extirpation of the Cancerous, a Justifiable Operation?	331	Wallian, Samuel S. An Open Letter to County Medical Societies in the State of New York ..	255
University of Maryland, School of Medicine	292	Uterus and Fallopian Tubes, Tuberculosis of the, The Pathological Anatomy of	187	Warburg's Tincture, The Residuum of, after Evaporation of the Fluid Portion, for Malarial Fever	472
University, McGill, Faculty of Medicine	282	Uterus, A Fibroid Polypus of the, with Solid Tumors of both Ovaries; Diagnosis with the Aid of the Microscope; Removal of both Tumors with the Uterus	4	Warren, S. P. A Successful Case of Placenta Lacerations	599
University of Michigan, Department of Medicine and Surgery	294	Uterus, Fibroid Tumor of the	57	Washington, Letter from	435, 517
University, The, of Nebraska	395	Uterus, Inversion of the	579	Water-Cress, The, as a Drug and as an Article of Food	56
University of the City of New York, Medical Department of the	302	Uterus, Inversion of the, followed by Spontaneous Amputation	561	Water, The Use of, in the Dietary of Young Children	247
University of Pennsylvania, Department of Medicine	306	Uterus, Prolapse of the	366	Water Supply, A Polluted	666
University of Pennsylvania, The Entrance Examination for the	182	Uterus, Cases of Sarcoma of the	65	Wells, Sir Spencer	242
University, The, of Prague	242	Uterus, Subinvolution of the	136	Whooping-Cough, Croton Choral in the Treatment of	340
University of Vermont, Medical Department of the ..	309	Uterus, the Subperitoneal Fibroid Tumor of, with both Ovaries and Stump of the Uterus removed by Laparotomy	558	Wire-Skewer, the Chicago Beef, Remarks on	392
University of Virginia, Medical Department	309	Uterus, Superinvolution of the	327, 585	Wood, H. C. A Clinical Lecture on some Nervous Affections in Children	705
University, Willamette, Medical Department of ..	305	Vaccination and Insanity	395	Wounds, Gunshot, A Lecture on the Treatment of ..	451
University of Wooster, Medical Department of the ..	305	Vaccination Returns, False	15	Wrist Joint, Exsection of the	111
University, The, of Würzburg	45, 648	Vaccination, Some Thoughts on	415	Wyeth, J. A. Aneurysm of the Internal Carotid; Ligation of the Common and External Carotid and the Superior Thyroid Arteries	428
Urethra, Two Cases of Amputation of the Penis, with Transplantation of the, into the Perineum, on account of Epithelioma	576	Vaccine, the Artificial Cultivation of, A Prize for ..	195	Wyeth, J. A. Two Cases of Amputation of the Penis, with Transplantation of the Urethra into the Perineum, on account of Epithelioma	576
Ureter, Enormous Dilatation of the, attending Paralysis due to Spina Bifida	671	Vaccina, Attenuated Variola	592	Yale College, The Medical Department of	15
Urethra, Foreign Bodies in the	27	Vagina and Perineum during Labor, A Theory to explain the Relaxation of the	360	Yellow Fever	42, 70, 96, 128, 156, 183, 214, 241, 267, 325, 357, 412, 438, 497, 719
Urethra, Stricture of the; Internal Urethrotomy ..	669	Vaginal Injections, Hot, A Possible Result of ..	403	Yellow Fever and Cremation	356
Urethra, Stricture of the; Internal Urethrotomy ..	715	Valgus, Double Hallux	109	Zonula Question, the, A Contribution to	21
Urethritis, Chronic	661	Varicocele	460		
Urethral Dilators, Hard-rubber	191	Vaseline Ointment, A Convenient Basis for Ointments intended for Applications to the Eyelids	102		
Urethrotomy, Internal	460	Vaseline, The Use of, to prevent Loss of Alcohol from Specimen Jars	244		
Urethrotomy, Internal, Two Cases of	515				
Uric Acid, the Excretion of, Influence of the Benzoates of Alkalies on	381				
Urticaria following Vaccination	74				
Uterine Cancer, The Treatment of, with Chian Turpentine	187				

